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ABSTRACT

Productive errors in the Spanish of 3 Spanish-speaking children and 115 adults learning Spanish as a second language are analyzed. The errors are organized into three categories--lexical, morphological, and syntactic--and each category is further divided according to the type of cognitive error-processing strategy shown: simplification, reduction of syntactic redundancies, rule overgeneralization, native strategy, and developmental stage. The pattern of errors suggests that adults and children use similar cognitive processes in language acquisition, particularly in the area of rule overgeneralization. It is concluded that adult Spanish as second language acquisition is similar to child acquisition of Spanish as a native language. This conclusion suggests the plausibility of universal cognitive strategies for language acquisition that are neither language nor age specific. A list of the subjects' errors is appended. (Author/RW)

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COMPARISON OF THE PRODUCTIVE ERRORS IN SPANISH FIRST AND SECOND LANGUAGE ACQUISITION: A PRELIMINARY STUDY

A Thesis

Presented to the

Faculty of

San Diego State University

In Partial Fulfillment

of the Requirements for the Degree

Master in Arts

in

Linguistics

---

by

Jenifer Burckett-Evans

Fall 1980

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ABSTRACT

This study presents an error analysis of the Spanish of adult L2 learners and child L1 learners. It is a cross-sectional study of the errors made by three Spanish-speaking children and 115 adults learning Spanish. Errors are analyzed and each divided into three error types: lexical, morphological, and syntactic. These three categories are each further broken down according to the kind of cognitive error-processing strategy evidenced--simplification, reduction of syntactic redundancies, rule overgeneralization, or native language transfer.

Child and adult error types are compared in each of the categories and within each of the processing strategies, as are changes in error patterns at different stages of the child and adult's development. Emphasis is placed on the comparison of the errors due to rule overgeneralization, errors which demonstrate that the child or adult is using the new language system as a basis for the creation of utterances. I consider these to be "productive" errors of L2 acquisition.

The pattern of errors suggests that adults and children utilize largely similar cognitive processes in language acquisition. This similarity is particularly striking with regard to overgeneralizations. I conclude that cognitively, adult Spanish L2 acquisition is similar to that of Spanish child L1 acquisition ($L2A^C = L1^C$).

This hypothesis strengthens Dulay and Burt's (1972) L2 = L1 hypothesis and suggests the plausibility of universal cognitive strategies for learning language that are neither language nor age specific.

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Approved by:

Charlotte Webb — Thesis Chair — 12/2/80 — Date

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TABLE OF CONTENTS

Page

ACKNOWLEDGMENTS iii

LIST OF FIGURES vi

Chapter

I. INTRODUCTION 1

II. PROJECT DESIGN AND ERROR TYPES 34

III. COMPARISON OF L1 AND ADULT L2 PROCESSING STRATEGIES 46

IV. CONCLUSIONS AND IMPLICATIONS 72

NOTES 82

REFERENCES 85

APPENDICES 90

A. ACQUISITION OF SPANISH GRAMMAR BY MEXICAN CHILDREN . 91

B. ADULT LEXICAL ERRORS 92

C. ADULT MORPHOLOGICAL ERRORS 94

D. ADULT SYNTACTIC ERRORS 97

E. CHILD LEXICAL ERRORS 100

ABSTRACT 102

LIST OF FIGURES

Figure		Page
1.	Concept of Interlanguage	6
2.	Order of Acquisition of 14 Grammatical Morphemes .	11
3.	Sequence of Acquisition of 11 Morphemes for Spanish and Chinese Children	14
4.	Comparison of Adult and Child Relative Accuracies for 8 Morphemes	16
5.	Comparison of Acquisition of Morphemes in English and Spanish as a First Language	24
6.	Individual Processing Strategy as a Percentage of Total Error Type Among Children and Adults .	69
7.	Strategy Types as Percentage of Total Syntactic Errors at Different Child and Adult Levels . . .	75
8.	Percentage of Gender Change Errors Among Beginning and Advanced Students	77

CHAPTER I

INTRODUCTION

Language acquisition has been a topic of investigation for many years. Primarily, however, this research has been directed toward first language acquisition, that is to say, how a child learns his first (native) language (L1). In the last two decades or so there has been an increasing movement toward the study of second language (L2) acquisition. This thrust has included research into adult second language acquisition, as well as studies of child second language acquisition and bilingualism.

In this thesis I propose to examine some of the kinds of productive errors in the lexical, morphological, and syntactic system of children who speak Spanish as a first language, and compare them to some of those made by adults who are learning Spanish as a second language. By "productive errors" I mean those utterances which are produced that, although differing from the accepted adult norm and therefore to be considered errors, show a logical, systematic development toward that norm. This comparison of Spanish first language and second language errors will, I hope, eventually lead to a greater understanding of some of the factors which affect Spanish second language acquisition and thus provide Spanish language teachers and textbook writers with further insights to aid

them in their respective tasks.

In the following pages I will 1) discuss some issues central to language acquisition, 2) examine the results of several developmental studies of language acquisition in both English and Spanish, 3) review the literature on error analysis in both Spanish and English first and second language research, and 4) place my study in perspective in light of the research in items (1) through (3).

Issues Central to Second Language Acquisition

In any study of language acquisition there are many variables that affect the learner and his output. Dulay and Burt (1977:68) list five:

(1) Socioaffective filter

(2) Cognitive organizer

(3) Monitor

(4) Personality

(5) Past experience (the first language)

To these can be added others mentioned by Taylor (1975:25):

(6) Notion of a critical period for second language acquisition

(7) Cognitive maturity

As my study deals with the comparison of child first language and adult second language acquisition, I shall discuss these seven points as they would effect each of the aforementioned classes of language learners. More emphasis will be placed on numbers (2)

and (7) as they are most relevant to both L1 and L2 acquisition.

The socioaffective filter has to do with the conscious or unconscious needs, attitudes, or emotional conditions of the learner (Dulay and Burt 1977:68-9). These filter what the learner receives as input and affect his rate of language acquisition. This filter is responsible for individual preferences for certain strategies of learning, for preference for what material is to be learned, and for deciding when language acquisition efforts should cease. For instance, when a child or an adult's second language speech is not identical to that of the standard adult version it may not be because the learner cannot speak that way, but rather, it may be because he does not choose to. Peer language pressure often has more effect on children than the language of their teachers or parents (Dulay and Burt 1977). With adults, their native language community may exert pressure against total assimilation into a new culture, thereby influencing their attitude toward language learning.

The second variable, the cognitive organizer, is a device which is responsible for constructing the learner's grammar by means of internal data processing (Dulay and Burt 1977:69). This variable, according to Dulay and Burt, has to do with a) the error types that occur as speech develops, b) the sequence of rules learners use before mastery of a structure, and c) the order of acquisition of structure.

Dulay and Burt's third variable affecting the learner and his output is the concept of "monitor". According to Krashen

(1977:177) the monitor is the conscious editing of one's own speech. The degree to which a learner monitors his output will affect this output both quantitatively and qualitatively.

The fourth variable is personality. It has been noted that persons who are outgoing and uninhibited tend to monitor their speech less frequently than self-conscious introverts who tend to over-monitor their speech (Krashen 1977:179-82). Some people's personalities may be more suited to classrooms, and others may prefer a more natural environment.

The fifth variable, past experience of having learned one's native language, often intrudes upon one's acquisition of a second language. For instance, when a Spanish student says, Soy hambre 'I am hunger', instead of the correct Tengo hambre 'I am hungry', the influence of the native language can be seen. This is evident, according to Dulay and Burt, in certain aspects of the acquisition of phonology as well as in other areas, but both Dulay and Burt (1972:241) and Krashen (1976:58) claim that many language learning errors are not due primarily to first language interference, but rather to other learner-employed strategies.

The sixth variable is the notion of a critical period. It has often been shown that young children acquire a second language more easily than adults (Lenneberg 1967). Researchers agree that by puberty, and perhaps long before (Krashen 1973, Lenneberg 1967), the brain has undergone lateralization. Many feel that lateralization may result in language acquisition being impeded. However,

others (Taylor 1975:29, Krashen 1978:59) suggest that the differences between adult and child language acquisition are not due to cognitive differences which arise as a result of a critical period, but rather are due to certain non-cognitive factors (e.g., attitude, motivation) and may have more to do with child and adult language acquisition differences than the notion of a critical period.

Cognitive maturity, the seventh and final factor affecting the learner and his output, is quite obviously greater in an adult learning a second language than in a child learning a first language, and this introduces several variables into the language acquisition process. This greater cognitive development may enable adults to profit from language instruction (Bailey, Madden, and Krashen 1974: 243). Since adult second language acquisition generally involves formal instruction, one cannot then assume that the grammar learned by a second language learner will show the same acquisition sequence as that of children during first language learning. Thus even the beginning adult learner often comes up with sophisticated sentences while the child first language learner is struggling with two and three-word utterances since his general cognition, short-term memory, and language development emerge hand in hand.

After presenting these seven variables, can one state which ones play the largest part in differentiating first and second language acquisition? I tend to agree with Marcus (1979:20) that quantitatively the presence of a language (native tongue) and the more advanced cognitive development of the adult learner give him

an advantage over the child first language learner. Qualitatively, however, both children learning their first language and adults learning a second language appear to use many of the same learning strategies as we shall see.

Cognitive Strategies

At this time I would like to focus on the cognitive strategies that account for the occurrence of second language learner utterances and, in turn, the errors which such strategies engender. Selinker (1972:213) uses the term "Interlanguage" to refer to the learner's attempted production of the target language. This interlanguage is really a link between the learner's native language and the target language to be learned, as can be seen in Figure 1 below.

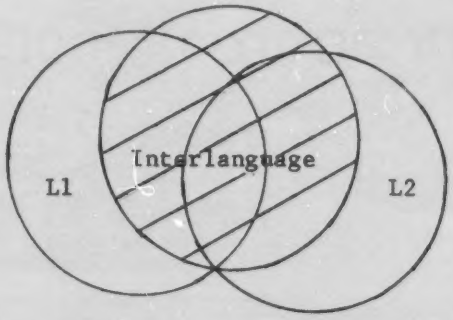

Figure 1

Concept of Interlanguage

It contains some of the first language and some of the second language structures, but a lot of it is in a transient state which is intermediate between the first and second language and which is full of ungrammatical structures.

Selinker (1972:211) maintains that there is a "latent psychological structure" in the learner's brain which is activated when one learns a second language. He states that there are five central strategies that exist in this structure and which account for the learner's interlanguage productions. Selinker calls these strategies:

(1) Language Transfer

(2) Transfer-of-Training

(3) Overgeneralization of Target Language Material

(4) Strategies of Second Language Learning

(5) Strategies of Second Language Communication

Language transfer is the process at work when the items, rules, and subsystems of interlanguage performance are a result of influence of the native language. Many of the errors which tend to stay forever in an interlanguage state, or which, as Selinker (1972:213) terms it, become "fossilized" are of this type. When native Spanish speakers put an /e/ before words beginning with /sk/ (as in eschool 'school') in English they are demonstrating this process.

When the rules and items in the interlanguage result from sources in the training procedures then we have the process known as transfer-of-training. This phenomenon can be seen in English when a Spanish speaker tends to use he always for the third person singular, even when it should be she, because the teacher always used he in examples of third person singular.

If the learner's production is in terms of hypotheses based on L2 structures (without reference to the L1), then Selinker says we have the strategy of second language learning operating. This happens when learners try to simplify the new language system. Evidence of this would be the fact that English speakers learning Russian often use the simplified masculine singular form of the past tense for both singular and plural of all genders.

When learners tend to avoid certain elements and structures in the target language during communication with native speakers, this, too, is considered a strategy of second language communication. This process is seen, for example, when Russians learning English speak without using articles or plurals because thinking about these grammatical processes would slow them down too much in their desire to communicate. They feel they know enough about the target language to be understood without having to worry about details.

Finally we have the process of overgeneralization of the target language which occurs when the learner overextends the rules of the new language. Thus when an English speaker learning Spanish says, "Yo sabo los verbos", he is applying the rule for formation of the first person singular present tense of regular verbs. The verb saber, however, is irregular and does not follow the normal rules for first person singular formation.

Developmental and Morpheme Acquisition Studies of First Language and Second Language Learners

The overwhelming majority of language developmental and morpheme acquisition studies have been done with English as the language in question. These include acquisition studies of English as a first language and as a second language for both children and adults. On the other hand, Spanish language acquisition studies have been relatively few both at the child (first language or bilingual) level and especially at the adult (second language) level. I propose to briefly review the English language acquisition literature prior to examining the Spanish studies.

One of the most carefully conducted and complete studies of the acquisition of certain aspects of child grammar in English done recently was that of Brown (1973). In this monumental effort, Brown and his co-workers did a longitudinal study of three children (ranging in age from 18-42 months) from Stage 1 through Stage 5 of their language development. The stages are based on the mean length of utterance (MLU) that the children had at various stages in their language development.[1] The acquisition of fourteen morphemes was plotted against MLU and age. Brown noted that in the earliest stages child speech consisted almost entirely of content words (nouns, verbs, adjectives). Not until later did the child add pronouns, and then functors (adverbs, prepositions, conjunctions, and interjections) due perhaps to their more abstract nature, as well as their comparative lack of lexical meaning. This phenomenon can be

seen in virtually all studies of language development--concrete precedes abstract and meaningful precedes relatively meaningless. Brown's observed order of acquisition of fourteen morphemes is considered by many as something of a standard and will be utilized as such for comparison with results from other studies (see Figure 2).

Another relevant study of English first language acquisition is that of de Villiers and de Villiers (1973:267-78). They collected speech samples from twenty-one children aged sixteen to forty months with a wide range of MLU. The speech samples were collected in two one and one-half hour play sessions with the children. Thus again it was natural speech which was being observed. The presence or absence of the fourteen grammatical morphemes used by Brown (1973) was scored. Two criteria were used for determining the order of acquisition of the morphemes, and a relatively invariant order was found (see Figure 2). De Villiers and de Villiers also studied parental speech input to the children, as had Brown. They concluded that the frequency of parental speech was not a factor in the child's order of acquisition of morphemes. They did note, however, that both grammatical and semantic complexity correlated highly with acquisition order. The order of acquisition of the children in this study was similar in many instances to that of Brown, as can be seen below in Figure 2.

morphemes	Brown (1973) (longitudinal study)	de Villiers and de Villiers (1973) (cross-sectional study)
Present progressive (-ing)	1	4
on	2.5	2
in	2.5	1
Plural	4	3
Past irregular	5	5
Possessive	6	10
Uncontractible copula	7	11
Articles	8	8
Past regular	9	7
Third person sing. regular	10	12
Third person sing. irregular	11	6
Uncontractible aux.	12	14
Contractible copula	13	9
Contractible aux.	14	13

Figure 2

Order of Acquisition of 14 Grammatical Morphemes

Slobin, another researcher in first language development, has conducted research designed to examine what cognitive processes underlie child grammar construction in the first language. In Slobin (1968:5) there is a review of Soviet research on this subject

and Slobin quotes Gvozdev (1928):

> Acquisition of native language follows a regular and identical course in different children, and this supports the notion that the acquisition of the native language is determined by general psycho-physiological conditions which function in the same fashion in all people and which therefore leave their mark on the structure of language itself.

Slobin, himself, notes that there may be a universal course of linguistic development--an idea also suggested by Dulay and Burt (1972, 1974). Slobin also comments that the cognitive prerequisites for grammar relate to both meaning and form, but that syntax develops before morphology. Thus the child strings unanalyzed words together before he uses grammatical markers (articles, inflections). Throughout, Slobin emphasizes that it is the child's cognitive growth which is the pace setter for his linguistic growth.

Slobin (1971:191-208) suggests that children use the following heuristic principles for language development:

(1) Pay attention to the ends of words.

(2) Phonological forms can be systematically modified (i.e., casa, casita, casucha).

(3) Pay attention to the order of words and morphemes.

(4) Avoid interruption of rearrangement of linguistic units (i.e., I can go?).

(5) Underlying semantic relations should be marked overtly and clearly.

(6) Avoid exceptions.

(7) Use of grammatical markers should make semantic sense.

Many of these strategies are also used by adults in second language acquisition.

Shifting to the realm of second language acquisition, let us take a look at the child second language research of Dulay and Burt. In 1974 they made a study of the natural sequences in child second language acquisition. This was a cross-sectional study of fifty-five Chinese and sixty Spanish children from six to eight years old. The Bilingual Syntax Measure (BSM) was administered to the children in English and their speech was then analyzed for eleven morphemes.[2] The basic question was whether the children from two dissimilar languages would show the same sequence of acquisition of the eleven morphemes. Previous studies (Dulay and Burt 1972, 1973) had shown that different children construct English syntax in similar ways and that the order of acquisition of eight morphemes was similar for geographically and ethnically different groups of Spanish-speaking children.

For this third study, Dulay and Burt (1974) hypothesized that if creative construction (overgeneralization of the target language, creativity and other universal cognitive mechanisms used in the construction of language) played a major role in second language acquisition, then they should find a common sequence of the acquisition of grammatical structures from the Chinese and Spanish children. This was because creative construction meant that a child used the second language rather than the first language to guide him in the acquisition process. The morphemes tested for and the

results can be seen in Fig. 3 below. Dulay and Burt (1974:360) concluded that their data supported the position that universal cognitive mechanisms were the basis for the child's organization of the target language, and that the second language system (and not the first) seemed to guide the acquisition process. This was true, they said, even though the grammar of the L1 morphemes was very different in Chinese and Spanish and even though both differed from English.

In a later study Dulay and Burt (1977:67) continue to stress the importance of creativity and creative construction as major principles affecting the child second language learners' hypotheses about the language in their successive approximations to adult language.

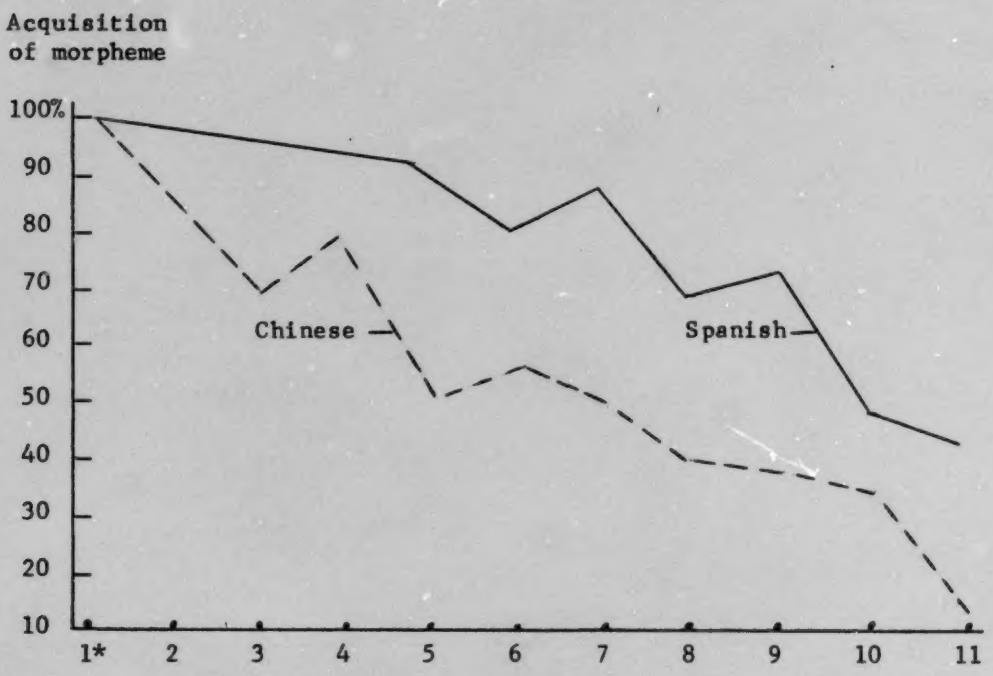

Figure 3

Sequence of Acquisition of 11 Morphemes for Spanish and Chinese Children (Dulay and Burt 1974)

* These numbers refer to the following morphemes:

1	Pronoun case	7	Past regular
2	Article	8	Past irregular
3	-ing	9	Long plural
4	Singular copula	10	Possessive
5	Plural	11	Third person singular
6	Singular aux		

This creative force is a product of the human mind and Dulay and Burt (1977) venture to say that in child second language acquisition the internal cognitive mechanisms are more important than the input frequency of a certain structure, a position supported by work in L1 acquisition as well (Brown 1973, de Villiers and de Villiers 1973).

Studies of adult second language acquisition also suggest the existence of universal second language learning strategies. Bailey, Madden, and Krashen (1974) tested the hypotheses 1) that adults from different language backgrounds learning ESL (English as a Second Language) would show agreement with each other in relative difficulty of acquisition of English morphemes and 2) that the relative order of acquisition of morphemes by adults learning English would be similar to that of children learning ESL rather than to those of children learning English as a first language. The study tested seventy-three adults aged seventeen to fifty-five in eight ESL classes at a college in New York. These adults came from twelve different language backgrounds (50% Spanish, 50% other). They were given the BSM and their acquisition of eight morphemes was observed. The results showed a significant correlation between Spanish and non-Spanish speakers, which the authors took as supportive of the first hypothesis. A comparison of their results with Dulay and

Burt (1974) also showed a significant correlation. Bailey, Madden, and Krashen (1974:369) concluded that adults from varied backgrounds use common second language learning strategies and that adults process data in ways similar to younger second language learners (see Figure 4 below). The authors also noted that errors in second language learning are not all the result of first language transfer, but rather are often intra-lingually based in the second language, and they concluded that such errors were due to the use of universal language processing strategies.

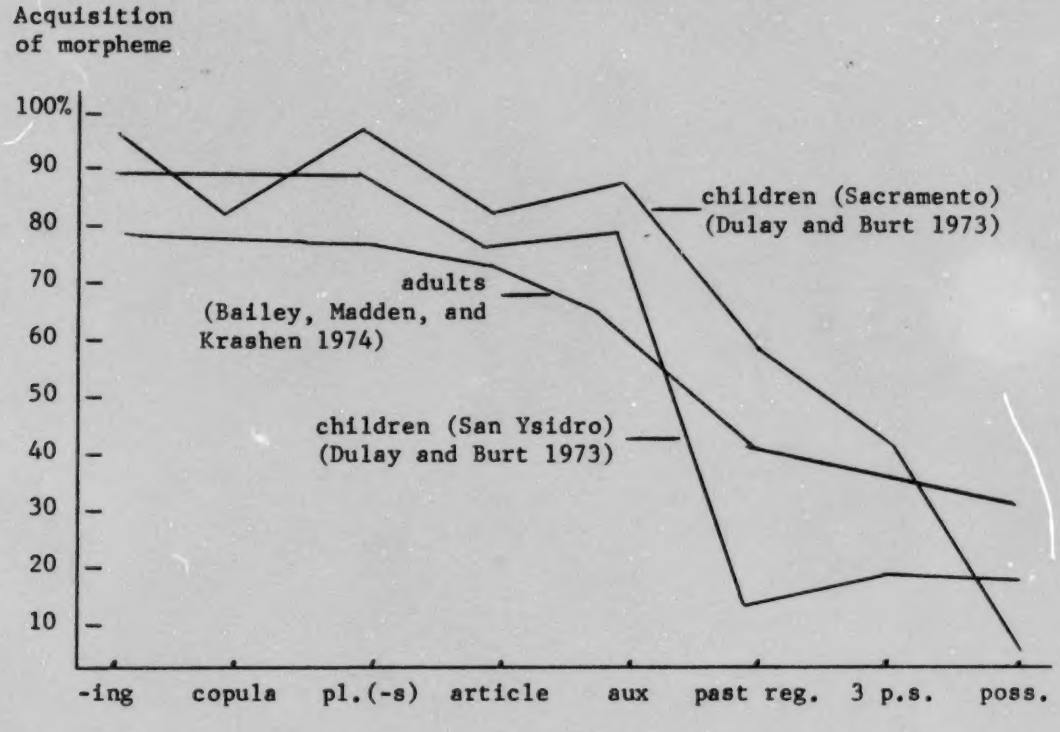

Figure 4

Comparison of Adult and Child Relative Accuracies for 8 Morphemes (Bailey, Madden, and Krashen 1974)

Taylor and Ervin-Tripp concur on many of the issues raised both by Dulay and Burt, and by Bailey, Madden, and Krashen. Ervin-Tripp (1974:119) states that in broad terms first and second language learning are similar at least in natural situations. She also mentions that it has been claimed that there are dramatic increases in the learning rate and rate of retention when adults are treated like children with respect to learning (Ervin-Tripp 1973:79). She further states that the differences in child and adult language learning are mainly quantitative and not qualitative.

Taylor (1975:29) states adults are not deficient (relative to children) in the ability to learn a second language, and furthermore adult second language acquisition is not different either characteristically or cognitively from that of child first or second language acquisition, but rather the differences are more quantitative than qualitative, thus concurring with Ervin-Tripp. Taylor suggests that some of the adult differences may lie in the affective domain in the areas of attitude and motivation. He stresses that first language and second language acquisition are cognitively similar processes and that apparent differences between them can be accounted for by the variables of 1) previous linguistic experience, 2) cognitive maturity, and 3) affective orientation (Taylor 1975:80).

Spanish Language Acquisitions Studies

Compared to the studies on development and morpheme acquisition in English, there are relatively few studies on Spanish, and none to my knowledge which deals with adult second language or child second language morpheme acquisition order. Several of them, however, deal with bilingual children.

Gustavo Gonzalez (1974, 1978) has done what is probably the most complete study of Spanish child language acquisition to date. He studied the syntactic structures characteristic of Spanish-speaking children from middle class families at different age levels from 2;0 (two years zero months) to 5;0 in the Lower Rio Grande Valley of Texas. Although not explicitly stated, these children probably also knew some English. Unfortunately, Gonzalez did not measure MLU, but rather based his study on chronological age, a fact which makes it difficult to compare his study with other Spanish morpheme acquisition studies. Gonzalez does, however, present thorough inventories of what structures his subjects had acquired at each of the different age levels in increments of about three months.

This study was cross-sectional (i.e., a single observation was made on many students) and each child was interviewed for a total of about two hours. Approximately half of this time was spent in natural speech and the other half required forced use of verbs and moods as well as a morphology test using Spanish nonsense words. Thus two types of data--elicited and spontaneous--were

collected. It is important to realize that when data are elicited, the child (or adult) is much more likely to be monitoring his output than if the data are collected spontaneously by means of natural speech. Gonzalez in the presentation of his findings, however, does not discuss this positive interaction.

Four children at each age level were interviewed by Gonzalez and the final results were based on three out of each group of four at any particular age level. (This omission of 25 percent of the sample seems to me to be poor technique, for it could greatly alter the results at each age level.) This study, then, dealt with performance and not competence, and assumed the latter if the former were present. Gonzalez does not state what percent of the time the children had to perform correctly in order to assume that a given structure had been acquired.

In evaluating the structures of the two-year olds Gonzalez (1978:9-10) notes that no subject pronouns were used and that mainly present tense was used; only rarely did preterite tenses appear. Ser and estar were used correctly and the adverbs that appeared were mainly locative. There were three kinds of interrogative, namely: 1) intonation (Mami, ¿otro?), 2) question word only (¿Qué?) and 3) sentences (¿Qué es esto?). The following two imperative types were also included: 1) verb only (toma) and 2) verb plus direct object pronoun (mátalos). There was limited use of the definite article and no plural. Gonzalez' conclusion was that at this age the child did not possess productive morphological patterns.

By the time children reached 2;6, a considerable increase in both the number and complexity of their syntactic patterns was noticed by Gonzalez (1978:13-7). There were more direct objects and pronominalizations of direct objects, and all possible orders of subject, verb, and object existed. There was increased use of the preterite, and the imperfect, present progressive, past progressive, past perfect, ir + a + infinitive, and present subjunctive were also found. There was full sentence negation and a greater variety of question words. The imperatives were more complex and included indirect object and reflexive pronouns as well as combinations of two pronouns together. There was more sophisticated adverbial modification and wider use of the definite article and of the plural article plus nouns. Verbs such as gustar, doler, and haber also appeared.

At 2;9 the children had thirty syntactic structure types at their command, an increase from twenty-one at age 2;6. At age 3;0 (thirty-three types), Gonzalez (1978:28-31) concluded that the children had reached a kind of plateau in their acquisition of syntax. These syntactic structure types, which Gonzalez claimed would not change much for two years, included use of all the major indicative verb tenses (except perfect tenses), the present subjunctive, the imperative with indirect and direct object pronouns, negation with no, all kinds of questions, adverbial clauses, compound sentences, and noun clauses as direct objects. It is interesting to note that the progressive tenses were well developed, but

not the perfective tenses. Gonzalez postulates that this is due to the more complex time concept of the latter. Another interesting fact is that not until age three and one-half did a child use the usted form--only tú had been used up to then.

Among other studies of Spanish first language grammar acquisition are those of Kernan and Blount (1969), Kessler (1971), Russell and Snow (1977) and Vivas (1979). Except for the Kernan and Blount one done in Mexico, most of the children in the other studies were either bilingual or knew some English. The amount of English known often depended on the age of the subject. Except for the Vivas study, all measurements were in terms of the child's chronological age rather than MLU, thus making it difficult to compare these studies with others due to the large number of variables (socio-economic level, solicitation technique).

Russell and Snow (1977:84) looked at the discourse skills (in particular the replacement of a noun phrase by a pronoun, and the deletion of coreferential noun phrases) in forty-two native Spanish speakers from lower socio-economic levels in grades K-6 in Los Angeles. The children were presented with three situations which they could respond to verbally. In two they could delete the noun phrase and put in a pronoun, while in the third they had to delete a coreferential noun phrase in a relative clause. The authors noted the tendency of economy of discourse with increase in age.

In Kessler (1971) the author was trying to discover how children learn language. She noted that empirical evidence suggested that structures shared by two languages develop in the same sequential pattern and at about the same rate. Variations from this sequence, she concluded, derive from language-specific rules relating deep and surface structures. She discovered that the English-Italian children learned a coarse pattern (Selinker's "Interlanguage") and then refined it. This is similar to the creative construction theory of Dulay and Burt. Kessler's study (like others mentioned above) also found that in the early stages of development in both languages the children omitted articles, prepositions, auxiliaries, and inflections (Kessler 1971:13).

Kernan and Blount's (1966) study of the acquisition of Spanish grammar by Mexican children sheds little light on the early stages of child Spanish language development as the children in this cross-sectional study were all five to twelve years old. Additionally, the data collection technique did not involve natural language use, in that the children were given nonsense words and expected to apply grammatical rules to them. For example, a child was given a picture of an object and told it was a "tifa" (a nonsense word). He was then asked what two of these would be called. The expected answer was "tifas", if the child had internalized the grammatical concept of plural. The children were tested for eleven grammatical concepts in this manner (see Appendix A). The authors concluded that with an increase in age

there was a corresponding increase in the acquisition of grammatical rules (Kernan and Blount 1966:13).

In Dolores Vivas' (1979) study of the order of acquisition of thirteen Spanish grammatical morphemes, the author poses several questions. Referring to Brown (1973) and de Villiers and de Villiers (1973), where children were shown to acquire morphemes in a consistent order, Vivas focused on what determines this order. Is it grammatical complexity or semantic complexity? Is morpheme acquisition order language specific or is it universal? She refers to Slobin's (1971) "universal operating procedure" which says that the acquisition of a morpheme depends on its word order, surface preservation of underlying structure, clear marking of underlying structure, overregularization, and semantic motivation. Vivas, like Brown and de Villiers and de Villiers, used MLU as well as age in her research.[3] In her cross-sectional study Vivas collected her data by means of an obligatory context technique. She used 90 percent correct usage to determine the acquisition of a morpheme. Her sample included four Spanish-speaking children aged 2;4 to 3;10 (MLU 2.7-6.1). She used the same two methods as de Villiers and de Villiers (1973) to rank order the results and found a high correlation between them. She then compared her results with those of the English-speaking children in Brown (1973) and de Villiers and de Villiers (1973) (see Figure 5).

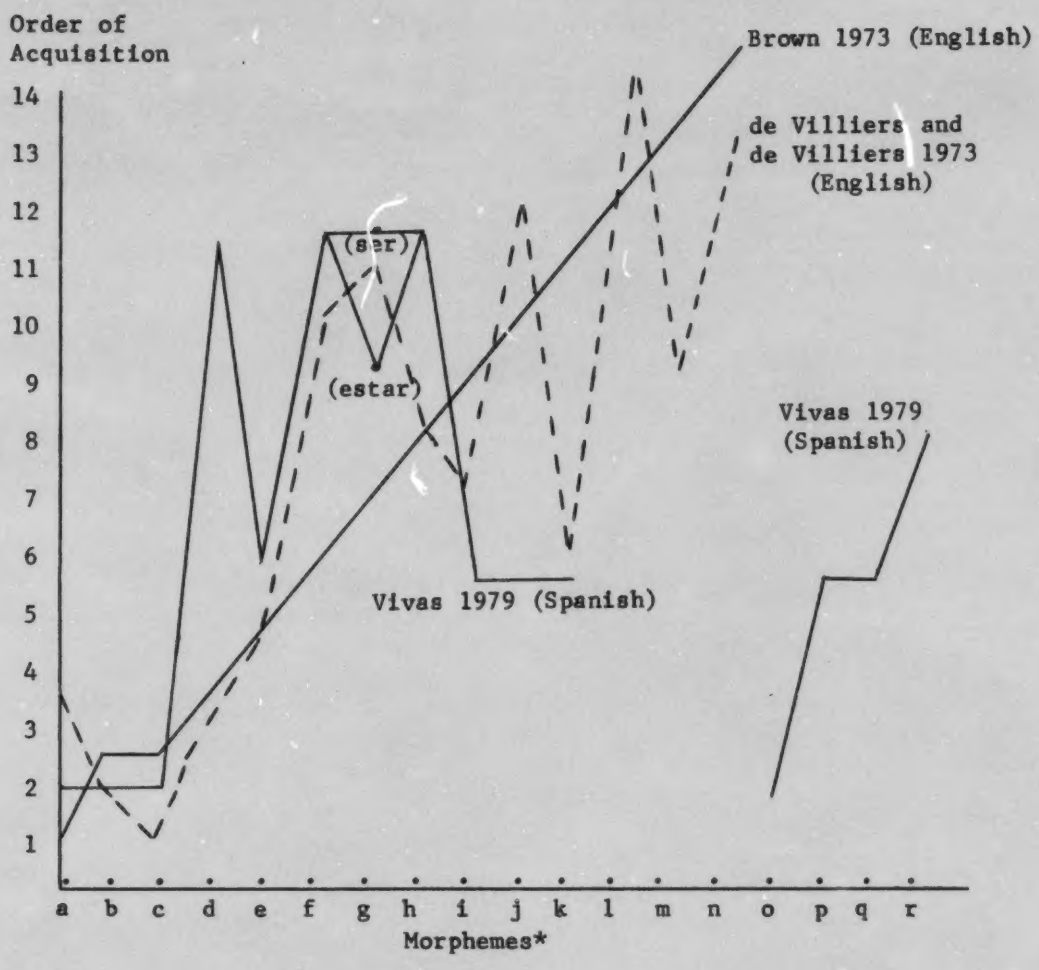

Figure 5

Comparison of Acquisition of Morphemes in English and Spanish as a First Language

*These letters refer to the following morphemes:

a	Present progressive	j	Third person singular regular
b	on	k	Third person singular irregular
c	in	l	Uncontractible auxiliary (Eng.)
d	Plural	m	Contractible copula (Eng.)
e	Past irregular	n	Contractible auxiliary (Eng.)
f	Possessive	o	Gender: masculine (Span.)
g	Uncontractible copula**	p	Imperative (Span.)
h	Articles	q	Gender: feminine (Span.)
i	Past regular	r	First person singular (Span.)

**In Spanish I include both ser and estar in this category.

As Vivas noted, it is difficult to compare the English and Spanish morpheme studies (as in Figure 5 above) as none of the morphemes are exactly the same syntactically and/or semantically. This is supported by the Spanish data in Figure 5 which shows poor correlations between the Vivas data and those of Brown and de Villiers and de Villiers. For example, there is more difficulty in the copula ser/estar in Spanish than there is in the English to be. Based on facts such as this, Vivas concludes that cumulative semantic complexity and cumulative grammatical complexity are in large part language specific (Vivas 1979:28).

Now, after having discussed some aspects of child L1 and L2 and adult L2 acquisition as seen in developmental and morpheme acquisition studies, what conclusions can be drawn? Certainly there is a tendency for researchers to look for universals in the acquisition process itself. How do children and adults process input? In Brown (1973), de Villiers and de Villiers (1973), Dulay and Burt (1972, 1974), Bailey, Madden and Krashen (1974) and others we have seen that there was a general agreement that children and adults acquire morphemes (be it in a first or second language) in a relatively invariant order. In the last two studies we have seen that the authors suggest that there are definite similarities between second language acquisition in both adults and children learning a second language. This supports the theory that second language learners utilize primarily the target language rather than the first language in the learning process. Taylor (1975:29) concurs

with this theory and adds that the creative cognitive processes of adults and children are similar, differing only quantitatively due to age and certain other factors present in adults rather than qualitatively.

Error Analysis Research in Second Language Learning

The field of error analysis is rather recent compared to that of morpheme acquisition. In one of the pioneer works, Corder (1967:162) explains that examining errors is important not only to correct them, but also to determine why they happen. He says that an analysis of errors is important 1) to the teacher to see how far toward a goal the student has progressed, 2) to the researcher to show how language is acquired and what strategies the learner uses, and 3) to the learner, for by making errors he learns and tests his hypotheses. Corder (1978:56) also discusses the theory of what causes errors. At first they were thought to be a sign that the learner had not yet mastered the rules he had been taught. Later errors were seen as an indication of the difficulties the learner was having with certain aspects of the language which could be explained by transfers of habit from the mother tongue to the new language (i.e., that errors could be predicted by contrastive analysis).

More recently, doubts have been expressed concerning the applicability of contrastive analysis studies to language teaching (Corder 1973; Dulay and Burt 1972, 1974; Richards 1971), and it

seems quite clear that not all errors can be traced back to the influence of the mother tongue. Currently, language acquisition and second language learning is more often approached as a problem of cognitive learning, and possession of a second language can be seen as possession of knowledge of a certain kind (competence) rather than as a way of responding to external stimuli. It is now deemed relevant to study the learner's performance to find out the nature of that knowledge and how it was acquired. Based on such findings, one might adapt teaching methods and materials in order to facilitate the process of language acquisition. The analysis of learner errors is of central importance, therefore, as it gives the researcher an important data base upon which to reconstruct the learner's knowledge of the target language.

As early as 1967, Corder had speculated that the process of first and second language acquisition were fundamentally the same and that when utterances differed it was due more to maturational, motivational, and environmental factors than to the influence of the adult's first language or the notion of a critical period. In a more recent article, (Corder 1978:66), he continues on this tack by stating that the learner creates a target language grammar for himself from linguistic data he is exposed to and from the teacher's help. This is the "creative construction" hypothesis of Dulay and Burt (1974). This grammar system is a transient one, continually changing as the learner receives more target language input. Thus, through developmental errors which are overgeneralizations of the

language being learned (be it the first language for children or the second language for all ages) and which result from the learning process itself, we find a system of language acquisition common to all learners. It should be noted, however, that this does not preclude the possibility that there are other kinds of errors too, such as language transfer.[4]

Richards (1971) and Dulay and Burt (1972, 1974) in their studies of the errors of ESL learners, and Selinker (1972) in his discussion on "interlanguage" all agree with Corder that overgeneralization of the target language is a major source of errors. Richards (1971:18-20) notes that ESL students' errors do not differ qualitatively from those made by children learning English as a first language. Also ESL students from widely differing language backgrounds make the same errors and, therefore, must be using the second language as a base. Dulay and Burt in their "L2=L1 Hypothesis"[5] state that children's second language "goofs" (productive errors) will be similar to first language "goofs" in (1) syntactic simplicity, (2) rule overgeneralization, and (3) reduction of syntactic redundancies (Dulay and Burt 1972:242).

Another interesting product of recent error analysis research is Selinker's (1972:118-21) theory of fossilization. Fossilization refers to incorrect elements which remain in a speaker's interlanguage regardless of the age of the learner or kind of instruction. These items may only appear in periods of anxiety or when the learner is distracted. It is a regressive behavior in that certain errors appear that were thought to have been eradicated.

Thus an ESL student may "know" that the third person singular present in English always has an "s", but in times of stress he may well "forget" to put it on.

As error analysis is a relatively new field there have been comparatively few comprehensive studies done. Dulay and Burt (1972) did a syntactic error analysis of children learning ESL, but few specific examples are given in their article. Bergman (1977) conducted a study on language acquisition in a bilingual (Spanish-English) child, but her study is one of comparative language development rather than an analysis of language errors per se. It nevertheless provides several examples of developmental errors. Brisk (1974, 1976), in her studies of the Spanish syntax of New Mexican children, also gives us many examples of child first language error and offers possible sources for some of the errors, though again her studies were not error analyses per se.

Susanne Medina-Nguyen (1978) did a study of overgeneralization errors in a group of Spanish-English bilingual children. She identified forty-three overgeneralization errors in her cross-sectional study of three to five year olds. She found interlanguage overgeneralization errors in seven English verbs, twenty-nine Spanish verbs, five English nouns, and two Spanish nouns. It would have been useful to know if these were balanced bilinguals in light of the distribution of these errors which we shall look at more carefully in Chapter II. It is illuminating to note that Medina-Nguyen found no interlanguage overgeneralizations (i.e., due to

language transfer) and that she noticed that affixes tended to stay, whereas internal vowels tended to change in the children's errors (Medina-Nguyen 1978:30). Thus in the error tenimos, it is the vowel i and not the affix mos that changes. As for the preferred root in this type of verbal error, she found that it alternated between the root form of the present tense and that of the imperative. She suggested that frequency of input (which form of verb is used most) probably determines this choice. She also surmised that semantic characteristics affect the selection of roots for verbs such as saber where the imperative is not often heard. Thus sabe and not sep is likely to be used as the root.

All of the above-mentioned studies involve child language (first and second) errors. Few studies have been done on adult second language errors, and of these, only a small percentage have examined errors in languages other than English.

Magdelhayne Buteau (1970) did a pilot study of students' errors in the learning of French as a second language. Some of her findings are quite relevant to my own study, as shall be discussed later. Her population consisted of 124 first year college students who were studying French. All of them had had six to eight years of previous French instruction. Each was given a grammar test, an oral interview, and asked to write a short essay on one of three topics. Buteau (1970:25-8) found there was no significant difference in error patterns as a function of language backgrounds. This supports the position that creative construction in the target

language is a more significant factor than language transfer as a basis for second language learner error. She also found that word order patterns which differed strikingly from the native language were more easily learned than patterns which were similar but differed subtly from L1. Buteau noted too that verb inflection showed fewer errors than proper tense usage. She noticed 85 percent of the students made the same kinds of errors on the essay part of the test as they had on their objective grammar test. The highest error correspondences appeared in the preposition system, gender and number agreement, and the use of determiners. There was also a high incidence of error (five or more errors per student) in gender distinction among 65 percent of the students. Again the author found no significant differences among students of different backgrounds, except for those from French-speaking families.

Another error analysis study of adults learning Spanish as a second language was conducted by Karen Marcus (1979), who collected language samples from beginning and advanced Spanish language students to determine if there existed a timetable for the emergence of particular error types at various stages in the learner's linguistic development. She categorized the errors within five major classes (Marcus 1979:25):

(1) "Pure" transfer (superimposition of English word order on the target language system)

(2) Overgeneralization due to transfer (carrying over of a rule or system from the mother tongue)

(3) Overgeneralization due to creative construction (over-extension of rule in target language)

(4) Performance (slips of the tongue or errors due to fatigue, stress, or distraction)

(5) Ambiguous

After analyzing the errors by type, Marcus concluded that beginners show a higher percentage (57 percent) or native language transfer errors than do advanced students (37.5 percent). She concludes that this is due to the fact that they have not yet developed a working competence in the target language. At the more advanced stage, on the other hand, she found an almost equal distribution of native language transfer and overgeneralization due to creative construction errors. Marcus suggests this indicates that at the advanced level the learner tends to deal more than at the beginning level with the second language structures as a whole rather than relying as heavily on the mother tongue to fill in the gaps in his interlanguage system.[6] These conclusions of Marcus will be compared with the results of my own data in Chapters III and IV.

Further Research in Error Analysis

We have examined several studies dealing with first language acquisition or second language acquisition in both English and Spanish. We have seen comparative studies of child first and second language acquisition, and others of child second language and adult second language acquisition. Dulay and Burt's child

English first and second language acquisition research was compared by Bailey, Madden and Krashen to their adult second language English results providing evidence that child L2 and adult L2 acquisition are similar. However, studies to date have not compared child first language and adult second language acquisition for Spanish. The present study extends our knowledge in the area of error analysis, by providing this data from a language other than English. Extending our knowledge in this way will enable us to better see whether theories founded on the basis of data from English language learners will generalize to language learning in general.

Further, I propose that concerning Selinker's (1972:118) five processes central to second language acquisition (language transfer, transfer-of-training, overgeneralization of the target language, strategies of second language learning, and strategies of second language communication) the last three apply equally well to first language acquisition; the last two can be more accurately stated as: strategies of language learning and strategies of language communication. Taylor (1975:29) and Ervin-Tripp (1974:119) have said that natural adult second language acquisition does not differ cognitively from natural child first or second language acquisition. If we find that Spanish L1 acquisition and Spanish L2 acquisition by adults are similar, then by focusing specifically on Spanish first language learner errors we can presumably predict a path of least resistance for adult Spanish second language learners with the goal of making their task a little easier.

CHAPTER II

PROJECT DESIGN AND ERROR TYPES

As we have seen in Chapter I, some developmental and morpheme studies have been conducted on the acquisition of Spanish, but only one other previous study has done an error analysis of adult learners (Marcus 1979). Both Ervin-Tripp (1974) and Taylor (1975) in their studies claim that in broad terms first and second language acquisition are cognitively similar processes (see Chapter I). Furthermore (as was also seen in the previous chapter), the error analyses of Corder (1967), Selinker (1972), Dulay and Burt (1972) and Krashen (1976) provide evidence that the cognitive processes underlying second language acquisition involve, to a large extent, creative construction in the target language, and not, as had previously been believed, only native language transfer. As discussed in Chapter I, Slobin (1971) and Dulay and Burt (1972) maintain that creative construction is a major factor in first language acquisition. This process of creative construction which results in an overgeneralization of the target language, creates errors which I will refer to as <u>productive errors</u> with the intention of determining if these productive errors are the same or similar in L1 and adult L2 acquisition.[7] Demonstration of similar types of productive errors in child L1 acquisition and adult L2 acquisition for Spanish would serve to strengthen the hypotheses that language acquisition data

from English are valid across languages.

Adult Study

The adult subjects were 115 students studying Spanish at San Diego State University who were enrolled in Spanish 102 (student having had at least one previous semester of Spanish), Spanish 211 (at least two and often more previous semesters), Spanish 212 (at least three and often more previous semesters), or Spanish 301 (at least four and often more previous semesters). The students knew they were being recorded for research pruposes. The speech samples were collected by means of a tape recorder or by my writing them down as soon as they took place (with several classes). I wanted the speech to be as natural as possible, and so in all classes except one (a part of the Spanish 211 sample) the students were engaged in free conversation/discussion in which they were not specifically instructed to monitor their performance. The Spanish 211 class not involved in completely free conversation was doing an assignment they had prepared the previous night in which they had to relate their reasons for studying Spanish. As they were not allowed to read anything, I feel (on the basis of the data) that their actual linguistic performance was not very unlike that of the other section of Spanish 211, even if their speech might have been a little less spontaneous. Therefore, I have included them in my sample.

My data were transcribed and analyzed with the help of a native Spanish-speaking teacher. I then separated the errors into three types, namely: lexical, morphological, and syntactic (see

Appendices B through D). I later subdivided each of these three types further depending upon what process (cognitive strategy) I felt had caused the error (see Chapter 3).

Lexical errors in my adult sample accounted for 26 percent of the total errors (see Appendix B). These errors were cases where the student had used the wrong word. They ranged from purely semantic errors or usage of the wrong part of speech to the use of false cognates. An example of a lexical error is provided in 1a.

1a. Estoy sacando seis clases.

(I'm taking six classes.)

Correct utterance: Estoy tomando seis clases.

This is a semantically based lexical error in which the student has confused the verb sacar 'take out' with the verb tomar 'take'.

1b. Si fuera una guerra ...

(If there were a war ...)

Correct utterance: Si hubiera una guerra ...

Here the student has used the wrong verb--ser instead of haber. This is a common mistake among beginners as ser is one of the earliest verbs learned, while haber is not taught until somewhat later. Thus students often tend to fall back on ser because they are more familiar with it.

Other examples of lexical errors included the following:[8]

1c. El mejor de gentes no te gusta.

(The majority of people don't like it.)

Correct utterance: A la mayoría de la gente no le gusta.

This error may be due to phonological confusion between mejor and mayor.

1d. Los interesantes de mí están música New Wave ...

(My interests are New Wave music ...)

Correct utterance: Mis intereses son la música New Wave ...

1e. ¿Quién monstruo se gusta plata?

(Which monster likes silver?)

Correct utterance: ¿A qué monstruo le gusta la plata?

The second error type, morphological, accounted for 38 percent of the total adult errors (see Appendix C). Morphological errors included errors of inflection in gender, number, and person as well as errors of verb tense and mood.

2a. Me gusta viviendo en San Diego.

(I like living in San Diego.)

Correct utterance: Me gusta vivir en San Diego.

This is a very prevalent error among beginning and intermediate students. They use the -ing form of the verb in English after the verb to like, and so do likewise in Spanish where, however, only the infinitive is grammatically correct.

2b. Cuando hay una grande guerra mundial ...

(When there is a big world war ...)

Correct utterance: Cuando haya una gran guerra mundial ...

The student in the above example has failed to abbreviate the adjective grande to gran when it occurs in prenominal position. As descriptive adjectives usually do not occur in this position very often, and as feminine adjectives do not usually become abbreviated, it is quite natural for a beginning student to make this error. Additionally, the student has not used the subjunctive in the adverbial clause after cuando.

Other kinds of morphological errors which are due to incorrect inflection, including that of verb stems, are seen below:

2c. Nosotros tienemos que dar ...

(We have to give ...)

Correct utterance: Nosotros tenemos que dar ...

2d. Digamos del debates.

(Let's talk about the debates.)

Correct utterance: Hablemos de los debates.

2e. ... que los corridas de toros es muy ridículo.

(... that the bullfights are very ridiculous.)

Correct utterance: ... que las corridas de toros son muy ridículas.

2f. ... en los países latinosamericanos.

(... in the Latin American countries.)

Correct utterance: en los países latinoamericanos.

The third and final type of error, syntactic, accounted for 36 percent of the total adult errors (see Appendix D). Deletion or addition of words, overinflection in verbs (i.e., queremos vamos

'we want we go'), incorrect use of functors (i.e., a, de, en, que), and faulty word order were included in this category.

3a. Quiero voy _hablar español en México.

(I want to go to speak Spanish in Mexico.)

Correct utterance: Quiero ir a hablar español en México.

In this example the student has overinflected the verb ir (voy) to agree with the first person singular quiero, when all he needed to use was the infinitive ir. Additionally, he failed to insert the preposition a which is obligatory after the verb ir before an infinitive.

3b. Es muy importante a comunicar_la gente a nadie le conoce.

(It is important to communicate with people whom nobody knows.)

Correct utterance: Es importante comunicarse con la gente a la cual nadie conoce.

This is a good example of addition and deletion of words. Instead of leaving out an a as in example 3a., the student in 3b. has inserted one where it was not needed. This may be due to the fact that the student is hypercorrecting. By inserting an unnecessary le the student may have been drawing an analogy between the verb conocer (which does not use a le before it) and verbs like decir that must use an indirect object pronoun (often le). The deletion of con seems rather strange as this student is ready to add words in other

unnecessary places, while the omission of la cual is to be expected (at this level) as it is a rather complicated construction at the beginning level. The omission of se is not surprising as it is redundant in this construction.

Further syntactic error examples include:

3c. Hoy estudiando información sistemas.

(Today I'm studying information systems.)

Correct utterance: Hoy estoy estudiando sistemas de información.

3d. Yo quiere hablar español cuando visitarlos.

(I want to speak Spanish when I visit them.)

Correct utterance: Yo quiero hablar español cuando los visite.

3e. Es más fácil de tenis.

(It is easier than tennis.)

Correct utterance: Es más fácil que el tenis.

Spanish L1 Acquisition Study

In my attempts to collect child Spanish language data I worked directly with three children and their parents. I tape recorded informal play sessions and then transcribed and analyzed the results. I supplemented this data with language samples from the child Spanish language studies of Bergman (1977), Medina-Nguyen (1978), Brisk (1974), Gonzalez (1974), Padilla and Lindholm (1976), and Padilla and Liebman (1975).

Two of the three children that I worked with were monolingual Spanish speakers (Rigoberto and Berenice). I spent a total of approximately four hours with each of them over a three-month period. Berenice was 1;11 (one year eleven months) with a MLU of 1.97[9] when I started recording her, and Rigoberto was 3;5 (MLU 3.07). The third child, Daniela (4;6, MLU 6.61), was a balanced bilingual (English/Spanish). I had known Daniela since she was 1;6 and had observed her speech and recorded it at various times prior to the current study. I chose children of different ages (and MLUs) so that I might observe developmental trends and what effect they produced on error types at any given stage.

Some may argue that bringing a bilingual child into this study defeats the purpose of the study--that of a speech comparison between first language and second language Spanish speakers. I suggest, however, that Daniela is a balanced bilingual and that her language systems developed separately and, therefore, Spanish can be considered a first language for her. This is supported by Bergman who notes in her study of developmental bilingualism that:

> The children's development of the verb in each language reflected that of monolinguals and that certain facts about the surface features of English and Spanish lent weight to a model of acquisition which would credit them with early separation of the two languages in order to process the two for comprehension. (p. 196)

Therefore, I felt that my use of Daniela in the study would not invalidate the results.

As with the adults' errors, I divided the children's errors into three types--lexical, morphological, and syntactic (see Appendix E). Of the total child errors 8 percent were lexical, 41 percent morphological, and 51 percent syntactic.

Lexical errors included the following:

4a. Bájala.

(Put me down.)

Correct utterance: Bájame.

Although the child (age 1;11) was confused the first and third person singular object pronouns--an error that would normally be considered morphological in nature--I have considered it lexical because I feel that the child is treating the word holophrastically, and therefore is not aware that it has constituent parts.

Another example of child lexical error is seen in 4b.

4b. Puso un suéter muy largo.

(He had a very long sweater.)

Correct utterance: Tuvo un suéter muy largo.

The child in the above example has confused the verb poner 'to put' with the verb tener 'to have'. This may be due to the fact that the verb ponerse 'to put on' is often used with items of clothing.

Another example of a child lexical error is:

4c. ¿Cuándo llega el inviernes?

(When will Friday come?)

Correct utterance: ¿Cuándo llega el viernes?

Here the child has probably experienced some phonological confusion between the words invierno 'winter' and viernes 'Friday'.

Morphology errors among the children consisted mainly of incorrect inflection of object pronouns. Other errors involved verb inflection, and there was one having to do with the gender of articles. That few errors involve gender accords well with Vivas' (1979) finding (see Chapter I) that gender is learned rather early compared with other morphemes. The following error is typical of those found in this category.

5a. Se lo iban a robar.

(They would have stolen them from him.)

Correct utterance: Se los habrían robado.

Here the child has used a masculine singular direct object pronoun even though its antecedent was zapatos 'shoes' which would necessitate a plural form of the object pronoun. She has also substituted a simpler past tense form of the verb for the conditional which was required in this case.

Other child morphological errors include:

5b. Los niños dijo que si les dijimos a la mamá qué pasó ...

(The children said to us that if we told the mother what had happened ...)

Correct utterance: Los niños nos dijeron que si le dijéramos a la mamá lo que había pasado ...

5c. El le dice que no le pongas la dirección.

(He tells her not to put the address.)

Correct utterance: El le dice que no le ponga la dirección.

5d. ... una sombrero.

(... a hat.)

Correct utterance: un sombrero.

For the final error type, syntactic, one finds a great many deletions among the children's errors. Examples in this category include:

6a. Voy a corretear__.

(I'm going to chase them.)

Correct utterance: Voy a corretearlas.

Here the child was talking about some hens (gallinas), but when asked what he was going to do with them he only managed to express the verb and not the direct object pronoun that was necessary to refer to the hens.

6b. Yo_acuerdo de estos dibujos.

(I remember these drawings.)

Correct utterance: Yo me acuerdo de estos dibujos.

In the above example the child has forgotten to insert the reflexive me before the verb acordarse 'to remember'. The semantic quality of the sentence, however, is not changed.

In the preceding pages both child and adult error types have been discussed. Adult errors were divided relatively equally (approximately one third each) among the three types. Child errors, however, show a much different distribution. Over half of the

children's errors are syntactic, while morphological errors account for 41 percent and the lexical for a mere 8 percent of the total.

Why is there such a difference in the distribution of error types between children and adults? I suggest that the children's ability to deal with lexical items develops before their ability to deal with morphological ones, and that both of these develop prior to the child's ability to feel completely comfortable with syntax. This reflects the relative cognitive and linguistic complexity of these categories and would perhaps account for the fact that more than half of child errors are of the syntactic type. The children's cognitive development has not progressed to a point where they are able to deal with the greater complexities of syntax and, as we saw in Chapter I, linguistic development goes hand in hand with cognitive development.

Even more important in this error analysis are the reasons why certain errors are made in each of the above three classes. What processes or cognitive strategies are at work to produce the different kinds of errors we found in each of the above error types? Which strategies engender productive errors? These questions will be addressed in Chapter 3, where we examine the strategies at work in error production.

CHAPTER III

COMPARISON OF L1 AND ADULT L2 PROCESSING STRATEGIES

As Dulay and Burt (1972) commented, "Making errors is a necessary part of language learning--you are hypothesis testing. You can't learn without goofing." (p. 236) Errors can be productive, but even more important, the cognitive strategies used in creating the errors can give us further insight into how adults and children go about learning a language.

Let us assume that the L2 learner approaches the target language with some sort of a native language filter, but yet wants to learn a new language system. I suggest that he uses the same kinds of strategies as the L1 learner, but that they manifest themselves differently at times due to the different nature of some of the problems in L1 and L2 acquisition. These processing strategies I will now discuss in terms of their relationship to child L1 and adult L2 errors (lexical, morphological, and syntactic) are the following:

(1) Simplification

(2) Reduction of syntactic redundancies

(3) Rule overgeneralization

(4) Native language transfer

Simplification

I will define simplification as the tendency 1) to omit certain items that are unnecessary for comprehension and that thus do not change the basic semantic import of the utterance. These items would include articles, indirect and direct object pronouns, some prepositions, and the verbs ser/estar (and, with children, certain other verbs). Most of these items are, of course, function words rather than content words. I will also include in this definition of simplification the tendency 2) to use indicative instead of subjunctive, present tense instead of past, and simple tenses instead of compound ones. This cognitive strategy, therefore tries to look at the language system in as basic and as uncomplicated a manner as possible.

Most learner errors that seemed to use the strategy of simplification were of the syntactic type, although there were a few morphological ones as well. This is natural, as this strategy involves words and not bound morphemes, except in the case of verb tense and mood simplification.

The following adult syntactic errors illustrate the process of simplification (only errors due to this process are underlined).

1a. Soy__persona muy activa.

(I am a very active person.)

Correct utterance: Soy una persona muy activa.

1b. Los hojas de__árboles son muchos colores bonitas.

(The leaves of the trees are many pretty colors.)

Correct utterance: Las hojas de los árboles son de muchos colores muy bonitos.

In both of the above errors the student has left out an article in order to simplify the utterance. In neither case does the omission affect the meaning substantially.

Elimination of prepositions was the most common adult syntactic error due to simplification in my data. Consider the following examples:

1c. Iré__la escuela.

(I will go to school.)

Correct utterance: Iré a la escuela.

1d. Muchos__los problemas son semejantes.

(Many of the problems are similar.)

Muchos de los problemas son semejantes.

1e. Es muy importante a comunicar__la gente a nadie le conoce.

(It is important to communicate with people that nobody knows.)

Correct utterance: Es muy importante comunicarse con la gente a la que nadie conoce.

1f. Es necesario tener un otra cosa para ofrecer__su empleo.

(It is necessary to have something else to offer in your job.)

Correct utterance: Es necesario tener otra cosa para ofrecer en su trabajo.

In all of these examples the learner has omitted a function word (preposition) which does not substantially alter the meaning of the sentence.

Omission of the verb ser/estar and simplification of mood and a verbal expression can be seen in the following:

1g. Los más importante para mí gozar todo hace.
(The most important thing for me is to enjoy all that I do.)
Correct utterance: Lo más importante para mi es gozar de todo lo que hago.

1h. Hoy estudiando información sistemas.
(Today I am studying information systems.)
Correct utterance: Hoy estoy estudiando sistemas de información.

1i. Si busque empleo, muchas veces el empleador va a trabajar lo que puede entender el español.
(If I look for a job, often the employer will give work to the one who can speak Spanish.)
Correct utterance: Si busco empleo, muchas veces el dueño va a dar trabajo al que pueda entender el español.

In the latter example the adult learner has eliminated the more exact, yet more complicated, expression dar trabajo 'give work' and replaced it by the simpler trabajar 'work'. This change creates an

ungrammatical sentence, yet the learner's meaning is quite clear. He has also simplified the mood of poder from subjunctive to indicative.

Children's syntactic errors due to the strategy of simplification appeared to be similar to those of adults. This was true even when the very young child (1;11 in example 1j) used telegraphic speech--a strategy by which children string two to five content words together (usually without function words).

1j. __canica cayó.

(The marble fell.)

Correct utterance: La canica se cayó.

1k. __comiendo.

(He is eating.)

Correct utterance: Está comiendo.

1m. Los niños dijo que si les dijimos a la mamá__que pasó ...

(The children said to us that if we told the mother what had happened ...)

Correct utterance: Los niños nos dijéron que si le dijéramos a la mamá lo que había pasado ...

1n. ...__la casa gorda.

(... of the fat house.)

Correct utterance: ... de la casa gorda.

1o. Voy a corretear__.

(I am going to chase them.)

Correct utterance: Voy a corretearlas.

In 1j. an article has been omitted, in 1k. the verb estar, in 1m. and 1o. pronouns, and in 1n. the possessive preposition de. These are exactly the same kinds of omissions as we saw in the adult errors. Again the meaning is not lost.

Morphological errors due to the strategy of simplification are not as prevalent as syntactic ones. Most adult errors of this type were similar to the following examples.

1p. Si tuvieras, iré a la guerra.

(If I had to, I would go to war.)

Correct utterance: Si tuviera, iría a la guerra.

1q. Yo pelearía si habría otro país ...

(I would fight if there were another country ...)

Correct utterance: Yo pelearía si hubiera otro país ...

1r. Si ganía dinero, no sabía hacer con el dinero.

(If I earned money, I would not know what to do with the money.)

Correct utterance: Si ganara dinero, no sabría qué hacer con el dinero.

Typical children's morphological errors due to the process of simplification can be seen below.

1s. Le pregunté si le gusta la comida.

(I asked him if he liked the food.)

Correct utterance: Le pregunté si le gustaba la comida.

1t. Ella dijo que no quiere que él entre.

(She said that she did not want him to come in.)

Correct utterance: Ella le dijo que no quería que él entrara.

There are obvious differences in the above five examples. The adult errors are sometimes due to incorrect tense, but are more often due to incorrect mood (e.g., use of indicative instead of subjunctive as in 1q. and 1r.). On the other hand, the children's errors are almost all due to wrong tense--present instead of past. It appears that the children know when to use the subjunctive correctly. It is tense which seems to confuse them more at this period. Basically, however, the principal motivation for both children and adults is to render the verbal system less complicated.

The use of the cognitive process of simplification as a strategy in child L1 and adult L2 error production, as discussed above, shows similarity between the two groups in the omission of articles, pronouns, prepositions, the copula, etc.

Reduction of Syntactic Redundancies

The second cognitive processing strategy is reduction of syntactic redundancies. I will define this process as a 1) lessening of the number of rules in the system so that certain morphemes are omitted (namely: the article, adjective, or noun plural -s or -es and the verbal plural -n) which are syntactically redundant in many cases. There is also a strong tendency 2) to eliminate syntactic gender, to use masculine instead of femine for articles, adjectives and nouns, 3) to use one basic form of the verb--the third person

singular or the infinitive--eliminating the plural and other morphological inflections of the verb, and 4) to omit redundant reflexive pronouns and redundant indirect object pronouns. All of these strategies, too, will produce errors which we include in the reduction of syntactic redundancies category. Here, as in the previous strategy of simplification, the semantic content of the utterance is not fundamentally altered as the morphemes and words omitted carry little semantic weight. The majority of both child and adult errors due to reduction of syntactic redundancies are found among morphological errors.

Obviously both the strategy of simplification and that of reduction of syntactic redundancies are ways for the learner--be he child or adult--to make the new language system less complicated and hence easier to handle. It was difficult at times to determine in which of the above categories an error belonged. However, there is a difference between (and a need for) both of these categories, for they describe different kinds of error processing strategies. The reduction of syntactic redundancies strategy omits redundant bound morphemes (i.e., the plural of articles, adjectives, nouns, and verbs) and redundant words (reflexive and indirect object pronouns) such as se and le. The simplification strategy omits words (i.e., free morphemes) such as articles, non-redundant indirect and direct object pronouns, prepositions and the copula. The former strategy alters redundant gender, number, and person morphemes, while the latter alters tense and mood morphemes and feminine

gender when it is not redundant. As I have already noted, because reduction of syntactic redundancies basically deals with morpheme simplification, most of the morphological errors fit into the reduction category rather than into the pure simplification category. Conversely, most of the syntactic errors that deal with omission of words fit more appropriately into the first category of pure simplification.

Now let us consider some of the different errors due to reduction of syntactic redundancies. Adult morphological errors included:

2a. ... que los corridas de toros es muy ridículo__.
(... that bullfights are very ridiculous.)
Correct utterance: ... que las corridas de toros son muy ridículas.

Here is a clear example of the use of masculine instead of feminine (los, ridículo) and singular instead of plural (es, ridículo). These errors are all reducing syntactic redundancies, because with the word corridas we know that it is feminine and plural. Therefore, the correct article (las), adjective (ridículas), and verb (son) are really repetitions of the features already found in the word corridas, and as such are redundant. It seems that the learner is trying to create a system that is uncomplicated and that uses as few inflections as possible.

2b. Los mexicanos mandarnos el petróleo.
(The Mexicans send us the oil.)

Correct utterance: Los mexicanos nos mandan el petróleo.

The above error--failure to conjugate the verb--again shows how the adult is attempting to reduce the new language system to its most basic components. The subject, los mexicanos, already alerts us to the number (plural) and so although the student has used one of the simplest forms of the verb (the infinitive), the semantic content of the utterance has not been obscured.

2c. Ellos va a estar felices.

(They are going to be happy.)

Correct utterance: Ellos van a estar felices.

In 2a. once again the subject sets the tone--plural. The verbal plural ending is really redundant as it does not provide any further information as to what is happening. Consequently, it has been reduced.

2d. Yo quiere hablar español.

(I want to speak Spanish.)

Correct utterance: Yo quiero hablar español.

As mentioned earlier, there is a strong tendency for the third person singular to be used in place of other verb forms. Here the yo 'I' has already signaled who the subject is. The verb ending is thus redundant.

Child morphological errors due to the reduction of syntactic redundancies are seen mainly in pronoun gender. Consider the following:

2e. Se lo comio el perro.

(The dog ate it up.)

Correct utterance: Se la comió el perro.

2f. Lo van a cortar.

(They are going to cut it.)

Correct utterance: La van a cortar.

In both of the above cases the child is using the masculine instead of the feminine gender. This same tendency was seen in adult errors of this type.

2g. Los niños dijo que ...

(The children said that ...)

Correct utterance: Los niños dijeron que ...

The above example is the only case of verb reduction among child morphological errors. As with the adult examples, the reduction of the verb form does not significantly alter semantic content here because the subject is already clearly defined as plural.

The process of reduction of syntactic redundancies is also seen in the syntactic error category though to a much lesser extent. Only two adult errors occurred in this category (see 2h. below) although I have heard them on many occasions among Spanish L2 learners. Among the children, however, I obtained several.

2h. Ella quiere casar__y tiene hijos.

(She wants to marry and have children.)

Correct utterance: Ella quiere casarse y tener hijos.

2i. Yo __acuerdo de estos dibujos.

(I remember these drawings.)

Correct utterance: Yo me acuerdo de estos dibujos.

2j. El monito__'costó.

(The monkey went to bed.)

Correct utterance: El monito se acostó.

2k. Canica__cayó.

(The marble fell down.)

Correct utterance: La canica se cayó.

2l. Yo__dije 'Hola' a Kevin.

(I said 'Hi' to Kevin.)

Correct utterance: Yo le dije 'Hola' a Kevin.

In all of the above errors the child has deleted an item which carries little semantic weight. In 2i., 2j., and 2k. that item is a reflexive pronoun, while in 2l. it is the redundant indirect object pronoun.

Comparing child and adult strategies of reduction of syntactic redundancies, it appears that, comparatively speaking, adults make far more errors than do children. Adult errors are very prevalent in articles and adjectives (both in gender and number) as well as in verbs (person and number), while children's errors tend primarily to involve pronouns and, only very occasionally, verbs. Perhaps there is also a tendency in English-speaking adults to be affected by native language transfer in this area, and thus we find many gender errors and errors of number on adjectives. The process, however, remains a reduction of syntactic redundancies in an effort to simplify the new language system.

Rule Overgeneralization

The third category of processing strategies is that of rule

overgeneralization. I shall define this process as one in which the learner either 1) extends a rule to a larger domain than is grammatically correct or 2) applies the wrong rule. Rule overgeneralization as a cognitive processing strategy is found among lexical and morphological as well as syntactic errors.

The following adult lexical errors illustrate this strategy:

3a. Se gusta una luna llena.

(He likes a full moon.)

Correct utterance: Le gusta una luna llena.

3b. Se lo estar muy fascinar y trágico.

(He is very fascinating and tragic.)

Correct utterance: Es muy fascinante y trágico.

3c. Si busque empleo, muchas veces el empleador va a ...

(If I look for work, many times the employer is going to ...)

Correct utterance: Si busco empleo, mucho veces el dueño va a ...

In the above three examples the adult learner has overextended the environment in which the underlined words can be used. In 3a. he has probably confused the reflexive se with the indirect object pronoun le. This is a common error as se is often heard by the student and is even used as an indirect object pronoun in some cases (e.g., le lo becomes se lo). In 3b. the student has again overextended the usage of clitic pronouns. Because se lo often comes before the verb, the student may feel that they sound good, and in any case feels that something is needed there. The verb, too, in incorrect in 3b. Estar

in this example could be considered an overgeneralization of the domain of this copula, or it could be the application of the wrong rule (estar used instead of ser). In either case, however, this is an example of rule overgeneralization. Looking at example 3c. we see a case where the learner has used the subjunctive instead of the indicative. This is a classic case of rule overgeneralization, for the student is accustomed to using the past subjunctive after si in hypothetical situations and perhaps feels si must always be followed by the subjunctive mood.

In both of the examples below the verb ser has been used instead of the correct verb haber.

3d. Si fuera una guerra ...

(If there were a war ...)

Correct utterance: Si hubiera una guerra ...

3e. Cerca de la frontera es muchas personas ...

(Near the border there are many people ...)

Correct utterance: Cerca de la frontera hay muchas personas ...

I suggest this is due to the fact that not as much time is spent teaching the verb haber as the verb ser--a verb introduced at and practiced from the very beginning of most introductory Spanish courses. Thus, when the student is sifting around in his lexical pool for a verb to put in the above examples, his tendency is to choose the one he is most familiar with, thus extending its correct domain.

All of the examples in 3a. through 3e. illustrate that the adult L2 learner is using the L2 creatively. Because he does not

yet have all the information he needs about the new language and its rules, he is constructing hypotheses about the new system using rules he has learned up to that point. This, then, is the creative construction hypothesis of Dulay and Burt (1972). It is productive because the learner is using the target language system as a base and he is trying to logically put things in their place by formulating rules. In the early stages of L2 acquisition, as we have seen, there is a natural tendency to overextend these rules.

Children also overextend language rules. Note the following:

3f. Bájala.

(Put me down.)

Correct utterance: Bájame.

In 3f. the young child (1;11) is still in the early stages of language development. She has overextended the meaning of this word (I suggest that to her it is a single word and not separable into morphemes) to refer to herself and not just to another person as the third person singular la ending would normally indicate.

Morphological errors due to rule overgeneralization are plentiful among both adults and children. They usually surface as vowel changes in verb stems or endings. They also are seen as the addition of unnecessary morphemes (i.e., -s, -n). In this latter aspect they are just the reverse of the reduction of syntactic redundancies. Thus if a student said, "Ellos va a hablar", we would consider that a reduction of a syntactic redundancy, but if the student were to say, "El van a hablar" we would most probably call that rule overgeneralization.

3g. Nosotros tienemos que dar ...

(We have to give ...)

Correct utterance: Nosotros tenemos que dar ...

3h. Tengo que aprendar español.

(I have to learn Spanish.)

Correct utterance: Tengo que aprender español.

3i. ... para comprer muchas cosas y comer.

(... in order to buy many things and eat.)

Correct utterance: ... para comprar muchas cosas y comer.

3j. ¿Cuándo veniste?

(When did you come?)

Correct utterance: ¿Cuándo viniste?

3k. No quiero pongar ...

(I do not want to put ...)

Correct utterance: No quiero poner ...

The first three are adult overgeneralization errors, while the last two were produced by children. They all involve application of the wrong rule. The most commonly heard form of tener is most likely tiene, and venga (for children) is probably even more common than viene. Thus the overgeneralized, incorrect forms often pattern the most widely heard form of the verb.

Other morphological errors due to rule overgeneralization among adults include:

31. ... en los países latinosamericanos.

(... in the Latin American countries.)

Correct utterance: ... en los países latinoamericanos.

3m. Yo vivo en San Diego por ochos años.

(I have lived in San Diego for eight years.)

Correct utterance: Hace ocho años que vivo en San Diego.

3n. Muchas veces trabajé contigo.

(I worked with her many times.)

Correct utterance: Muchas veces trabajé con ella.

3o. Un guerra pueden comenzar.

(A war can start.)

Correct utterance: Una guerra puede comenzar.

3p. Ella quiere casar y tiene hijos.

(She wants to get married and have children.)

Correct utterance: Ella quiere casarse y tener hijos.

In 31. and 3m. the student has done the opposite of simplification and reduction of syntactic redundancy--he has added an -s. He is thus overextending the correct environment of the plural morpheme. Example 3n. illustrates the overgeneralization of the second person singular pronoun to the third person singular environment. Possibly the student believes that if he is talking about his friend he can use the tú form regardless of whether it is direct address or not. In 3o. the learner has used the plural verb in a case where it is unnecessary. Again this is just the opposite of the strategy that reduces syntactic redundancies. The error in 3p., a classic case,

seems to indicate that the learner was drawing a parallel between tiene and quiere and not between tener and casar.

Children's errors of this type include overgeneralization of formation of diminutives as in 3q. below where the child seems to have made a false analogy.

3q. Tengo los pies secaditos.

(My feet are dry.)

Correct utterance: Tengo los pies sequitos.

Finally, looking at syntactic errors due to rule over-generalization we find a tendency for both adults and children to incorrectly use some function words that carry grammatical meaning. One also sees incorrect word order or the unnecessary addition of words. Note the following:

3r. Es más fácil de tenis.

(It is easier than tennis.)

Correct utterance: Es más fácil que el tenis.

3s. Me subí en un árbol.

(I climbed up into a tree.)

Correct utterance: Me subí a un árbol.

3t. Es muy difícil para tener un novio latino.

(It is very difficult to have a Latin boyfriend.)

Correct utterance: Es muy difícil tener un novio latino.

3u. Quería a comer.

(I wanted to eat.)

Correct utterance: Quería comer.

3v. Mis amigos pueden mi llamar.

(My friends can call me.)

Correct utterance: Mis amigos me pueden llamar.

3w. Me se olvidó.

(I forgot it.)

Correct utterance: Se me olvidó.

In 3r. (adult) and 3s. (child) the same process can be seen--that of applying the wrong rule and placing the prepositions de and en in an incorrect domain. Examples 3t. (adult) and 3u. (child) also illustrate similar strategies. Both adult and child have added a preposition when it was not necessary. Finally, in 3v. (adult) and 3w. (child) we observe incorrect word order. This particular error appears to be much more widespread among adults than among children. This may well be due to certain syntactic restraints put on children due to their lack of cognitive maturity. Only three child errors of this type occurred in the corpus and all were produced by the same child.

Native Language Transfer

The fourth and final processing strategy which I will discuss is native language transfer. There has been much controversy as to the role of the native language in learning a second language (see Chapter 1). Some years ago it was thought to play a major role in second language acquisition, but now it is generally seen as relatively less important, while the creative construction hypothesis

(Dulay and Burt 1972) is held to be a major factor in both child and adult language acquisition. The discussion and examples in the preceding pages of this chapter showing how learners use strategies of simplification, reduction of syntactic redundancies, and rule overgeneralization tend to corroborate the latter statement. Nevertheless, I believe that native language transfer does play a role in second language acquisition. This, quite clearly, is a difference between L1 and L2 acquisition, for the L1 learner has no other native language (bilinguals excepted).

Native language transfer, like overgeneralization, potentially provides an explanation for both lexical and morphological errors as well as for syntactic errors. Lexical errors are frequently straight carry-overs from English as can be seen below.

4a. Los países europeanos ...

(The European countries ...)

Correct utterance: Los países europeos ...

4b. Es un grupo largo.

(It is a large group.)

Correct utterance: Es un grupo grande.

4c. ¿Quieres ir a una fiesta anoche?

(Do you want to go to a party tonight?)

Correct utterance: ¿Quieres ir a una fiesta esta noche?

In 4a. and 4b. there is no question of the direct influence of the native language. Example 4b. is what is commonly known as a false cognate. In 4c. it is not as obvious. I believe that error

occurred because the student was thinking of the one-word expression, tonight, in English and so chose the only one-word expression in Spanish that has anything to do with the concept of night. It might also be argued that the errors in 4b. and 4c. are overgeneralizations and that the learner has simply extended them to an incorrect domain.

Morphological errors due to native language transfer most often occur with verbs, and in particular with the present participle which is used in a more restricted environment in Spanish than in English. Consider the following:

4d. Me gusta mucho viajando en México.

(I really like traveling in Mexico.)

Correct utterance: Me gusta mucho viajar en México.

4e. ¿Qué piensas de charlando de ...?

(What do you think of talking about ...?

Correct utterance: ¿Qué piensas de charlar de ...?

Other instances of native language transfer occur with words that are normally pluralized in English, but which are singular in Spanish.

4f. La gente comen el toro.

(The people eat the bull.)

Correct utterance: La gente come el toro.

4g. Habrá muchas gente.

(There will be a lot of people.)

Correct utterance: Habrá mucha gente.

In both of the above cases the learner has connected the English idea of "people" with a plural form, which happens not to be the case in Spanish.

Syntactic errors involving native language transfer also occur. There are more errors due to native language transfer in syntax than in either the lexical or morphological categories. The following examples will give an idea of what these errors are like.

4h. Este es un razón__es necesario para mi aprender más español.

(This is one of the reasons I need to learn more Spanish.)

Correct utterance: Esta es una de las razones por la cual es necesario que aprenda más español.

4i. Yo gusta hablar con los waitress muy bonitas.

(I like to speak with the very pretty waitresses.)

Correct utterance: Me gusta hablar con las meseras muy bonitas.

4j. El hombre se cortó su oído.

(The man cut his ear.)

Correct utterance: El hombre se cortó el oído.

4k. En domingo va a mirar el fútbol.

(On Sunday he is going to look at the football.)

Correct utterance: El domingo va a mirar el fútbol.

41. ... si van a Irán o un otro país.

(... if they go to Iran or to another country.)

Correct utterance: ... si van a Irán u otro país.

The errors in examples 4h., 4k., and 41. are due to pure transfer from English. The learner has virtually translated these utterances word for word. In 4i. the student is having problems with the verb gustar, which does not behave like the majority of English (or Spanish) verbs. The student has properly inflected the verb itself, but has mistakenly used the subject pronoun yo 'I' before it instead of the correct indirect object pronoun me 'to me'. Errors involving this verb often appear in the form yo gusto 'I am pleasing', which structurally is obviously a native language transfer error, because students assume that yo gusto means I like. Example 41. provides another classic instance of native language transfer. The student presumably knows that otro (when used with the definite article) means other, and so assumes that to say another the indefinite article must be added. This, of course, is not the case in Spanish.

Having now examined the different processing strategies at work within each of the error types, I would like to summarize the results as seen in Figure 6.

	Type of Error					
	Lexical		Morphological		Syntactic	
Processing strategy	child	adult	child	adult	child	adult
Simplification			62%	12%	42%	22%
Reduction of syn. red.			14%	50%	16%	2%
Rule overgeneraliz.	100%	85%	24%	33%	42%	27%
Native lge. transfer		15%		5%		49%

Figure 6

Individual Processing Strategy as a Percentage of Total Error Type Among Children and Adults

Simplification, as seen in Figure 6, played a major role in errors of both morphology and syntax among children while for adults it played a minor role in these two areas. In morphology children tended to make errors with tense, while adult errors tended to involve mood. In syntax, however, adults and children tended to make similar errors--both omitting prepositions, articles, and occasionally even verbs.

Errors of reduction of syntactic redundancies played a major role (50 percent) among adult morphological errors--mainly involving gender and number in adjectives and articles and number in verbs. With children, this strategy mainly produced errors of pronoun gender. Perhaps because of the English language's lack of gender in articles and adjectives this strategy accounted for such a large

percentage of adult morphological errors; however, above all this strategy is a means of making a system less complicated, which is perhaps what both the adult learner and the child are striving for in their attempt to learn a language. Among syntactic errors this strategy was of minor importance, although child and adult errors showed great similarity.

Overgeneralization errors accounted for the overwhelming majority of child and adult lexical errors. Among children the errors were almost equally divided among pronouns, verbs, and nouns. Among adults, however, half of the overgeneralizations concerned verbs--apparently the most complicated part of speech for the adult learner to control. In this lexical category both children and adults made some very creative errors which produced non-words such as inviernes, cercas, and chisto in their efforts to construct words in their new language system.

Errors due to overgeneralization were also fairly frequent in morphology, and even more so in syntax, especially among children. In both adult and child morphological errors, alteration of verb stem and endings predominated. Children, however, tended to create impossible forms (i.e., non-words such as pongar, veniste), while most adults created possible words that were not grammatically acceptable in the environment in question (i.e., hablen when hablan was required). Here, as in the lexical category, errors showed widespread use of analogy. It was clearly the case that the learner was using the language creatively.

Syntactic overgeneralizations among children and adults were very similar in type, although they played a more major role in children's errors than in those of adults. Errors consisted of the incorrect use of function words (a, de, en), the addition of these same types of words, and occasional errors of wrong word order (seen more in adults than in children). Again, as in the two previous areas, creative language use was clear in these structural errors.

Finally, among adults, evidence of native language transfer was observed. This process did not seem to play an important role except for syntactic errors. Here, adults tended to rely at times on their native language.

Marcus (1979) found that among beginning Spanish students there were more errors of native language transfer than of overgeneralization, while among more advanced students, errors resulting from these two processes were about the same. My data indicate similar results for beginners, but among advanced students, my data indicate that errors of overgeneralization are more prevalent than are errors resulting from native language transfer. For children, my data show a trend toward fewer simplification and reduction of syntactic redundancy errors and a considerable increase in the number of overgeneralization errors with increasing age. In both these cases--older children and more advanced adult students--the process of creative construction in the new language system (rule overgeneralization) appears to take over as the most important cognitive strategy.

CHAPTER IV

CONCLUSIONS AND IMPLICATIONS

On the basis of the error analysis in Chapter 3, it appears that children learning an L1 and adults learning an L2 use similar cognitive strategies in learning Spanish, although the relative percentages of use of these strategies and the kind of use within the strategy itself may vary. This is perhaps due to the differences in cognitive maturity (and, consequently, in linguistic maturity) between the two groups and also to non-cognitive factors (i.e., past experience, affective orientation, monitor). Even within each group the strategies may vary among children at different ages and among adults at different levels.

Let us discuss these differences between adults and children with regard to (1) the kinds of use within a strategy itself and (2) the change in strategy use with increase in children's age or adults' length of study, in order to determine if they are substantial enough to invalidate the hypothesis that cognitively, L2 acquisition of Spanish by adults is similar to that of L1 acquisition of Spanish by children, a hypothesis which I will refer to as the $L2A^C = L1^C$ hypothesis.

Kinds of Use Within Each Processing Strategy

Among morphological simplification errors, by far the greater number of child errors is due to verb tense (i.e., past tense is changed to present). Among adults the majority of morphological simplification errors concern mood (i.e., subjunctive is changed to indicative). While there is a difference here, the question is one of whether or not this difference is cognitively significant. First, there are instances of child mood errors and adult tense errors; hence neither of these strategies is unique to either group. Additionally, studies have shown that a child's time sense is not fully developed relative to an adult's due to factors of maturity (Foss and Hakes 1978:255). Mood, however, may be related to how one feels about something and thus not so difficult for a child to handle. Therefore, these child-adult differences in mood/tense errors are primarily attributable to factors of time sense and structural complexity and are thus irrelevant with respect to the validity of the $L2A^C = L1^C$ hypothesis.

Among syntactic simplification errors one finds great similarity in kind between children and adults. Both omit articles, prepositions, pronouns and the copula much more often than they do verbs or nouns.

Morphological errors due to the reduction of syntactic redundancies appear to be virtually non-existent in children--there only being three such errors in my child sample. Because each of

these three errors affects a different part of speech--thus not indicating a tendency toward reduction of any particular one--it would be meaningless to compare these (in kind) with the forty-four adult errors obtained in this category.

Syntactic errors of reduction of syntactic redundancies were also similar in kind among children and adults, and in both cases there were relatively few errors of this type (see Appendix D).

In my data, errors due to the processing strategy of overgeneralization--the so-called "productive" errors--showed more similarities in kind than errors due to any of the other processing strategies mentioned above, a finding which is in accord with the findings of Corder (1978). Thus in the lexical category are found similar sorts of adult and child errors due to purely semantic factors, to phonological confusions, and to distinctions between ser and estar.

Among morphological overgeneralization errors there is also a high correlation in kind between adults and children. Sixty percent of child errors involved verbs, while 67 percent of adult errors did.

Syntactic overgeneralization likewise shows similarity between children and adults. Both groups' errors primarily concern addition of an unnecessary functor or use of the wrong functor--most of these occurring among prepositions.

In conclusion, although there are a few instances of difference in kind between child and adult errors, these were shown

to be due to variables unrelated to the cognitive organizer and thus the $L2A^C = L1^C$ hypothesis.

Change in Error Type with Increasing Age or Length of Study

Among the adults and children certain changes in the usage of error types in the syntactic error category are apparent between different adult levels and different child MLUs as seen below.

	Adults		Children		
	class level			MLU	
	beg.	adv.	1.97	3.07	6.61
Strategy type					
Simplification	36%	8%	71%	50%	27%
Reduc. of sy. red.		8%	29%		18%
Overgeneralization	21%	59%		50%	55%
Native lge. tns.	43%	25%			

Figure 7

Strategy Types as Percentage of Total Syntactic Errors at Different Child and Adult Levels

As noted in Figure 7, for both adults and children errors of simplification tend to decrease with an increased ability to manipulate the language. This could well be due to the fact that both advanced students and older children have a better grip on the syntactic structure of the language and are thus surer of what words should be used in any given situation.

Errors due to reduction of syntactic redundancies, which appeared primarily among the morphological errors in my data (see Appendix C), showed no perceptible decrease either among advanced adult learners (compared to beginners) or among children in the course of the time span I observed. This would suggest late acquisition of concepts included in this category for both children and adults.

It further appears that as children get older and that as adults become more advanced in the L2, they tend to make comparatively more errors due to rule overgeneralization--errors involving creative use of the target language. Returning to Figure 7 it can be seen that there was a marked increase in overgeneralization errors from beginning to advanced students (and a marked decrease in native language transfer errors). These are the productive errors which indicate that the student is thinking in the target language and using the target language system to create his new grammar. Among children's syntactic errors this tendency for greater percentage of overgeneralization errors with increase in MLU (and age) is also evident.

An additional source of errors which I would like to discuss is that of gender. Gender (and number) errors continued to occur even among the most advanced group of students in my adult sample. This is supported by Buteau (1970), whose population consisting of advanced French students continued to show a large percentage of gender error even in written tests where their monitor was presumably

on (see Chapter 1). In the oral data of my population some of these gender errors may be related to performance rather than competence. As Marcus (1979) noted, at the advanced level students are more concerned with communicating and less concerned with the grammaticality of their utterance than at the beginning level. Marcus discussed gender errors in some detail in her results.

	Marcus (1979)		Burckett-Evans (1980)	
	level of student			
	beg.	adv.	beg.	adv.
Gender change				
Masc. should be fem.	52.5%	79%	79%	100%
Fem. should be masc.	47.5%	21%	21%	0%

Figure 8

Percentage of Gender Change Errors Among Beginning and Advanced Students

As can be seen in Figure 8, with the exception of the beginning students in Marcus' sample, most students tended overwhelmingly to choose masculine instead of feminine when faced with a gender choice. She posited that the asymmetry of almost 80 percent to 20 percent for the masculine form found at the advanced level might be attributable to native language transfer. This, she stated, was because in the English pronoun system the masculine is the unmarked form. She also suggested that the asymmetry in errors could be due to creative construction wherein the student had made an attempt to

simplify the gender system (using mainly masculine) and thus reduce the learning burden. My results show students have a strong tendency to prefer masculine to feminine. I thus concur with Marcus' gender simplification (reduction of syntactic redundancies) hypothesis concerning advanced students. Further, my data indicates that this gender reduction process takes place at the beginning level as well as at the advanced.

In summary, developmental changes in error type are very similar among more advanced adults and children with higher MLU. This provides further evidence in support of the $L2A^C = L1^C$ hypothesis.

Validity of $L2A^C = L1^C$

Dulay and Burt (1972), among others, claim on the basis of their research on the acquisition of English by children that L2 = L1, that both first and second language acquisition involve a creative construction process which results from the use of universal learning strategies (see Chapter I). While admittedly I have not shown that all of the data evidence similarity, I have shown in my study that on the whole children and adults make similar kinds of errors. Thus the data from the present Spanish L1/adult L2 error analysis (as seen above) also support the L2 = L1 hypothesis--which, due to the fact that my data included adult and not child L2 learners, I have renamed $L2A^C = L1^C$--suggesting the universality of cognitive strategies for learning language that are not language or age specific,

although their manifestations may differ in non-cognitive ways (as discussed in (1) and (2) above).

Implications for Teaching L2 to Adults

Given the validity of the above studies (mine and Dulay and Burt's), how can we develop better and more natural second language teaching methods and environments based on what we have discussed about Spanish second language acquisition?

The implications of my study in conjunction with other studies discussed in Chapter I would seem to indicate that adults as well as children learn some concepts in a certain order and will only learn them when they are ready to and not before. This is apparent from the fact that some early errors correct themselves later on. Perhaps, then, adults do not need to be taught everything. If, as my study (as well as others) has shown, making errors is an integral part of language acquisition, then the most successful classroom could be one in which the teacher, after making some generalizations about a certain concept, lets the students speak freely and make errors. If one of the necessities of children learning a first language is exposure to an adequate amount of natural language and we have seen that cognitively L2 = L1, then adult L2 learners should be exposed to an adequate amount of natural target language input upon which their cognitive strategies can go to work.[10]

If structures are learned when the student is ready, is there need for explanation in the adult L2 classroom? I believe that some explanation can facilitate adult L2 acquisition. These would include generalizations which, as we have seen from our study of overgeneralization errors, get the student to think in the language he is learning.

Should student errors be corrected and if so, what kinds of errors should be corrected first? Some errors correct themselves; others do not. As my data show, initial errors that make the language less complicated (i.e., simplification and reduction errors) tend to change into more productive errors of overgeneralization as the learner advances. At this point in L2 acquisition we can often see a shift away from L1 towards L2 as a system of support. Thus often by a more advanced stage, simplification errors and some native language transfer errors have corrected themselves. Additionally, other errors, such as gender (as we saw in the morphological reduction of syntactic redundancies category), which may persist even into advanced levels, are often related to performance rather than to competence. If the goal of the L2 student is communication, then as Dulay and Burt (1977) suggest, such errors need not be corrected initially. Rather correction should center on errors that interfere with the meaning of the utterance. As students become more advanced, then more attention can be drawn to the subtleties of the language; by this time many of their initial errors will have already corrected themselves.

What is the place of drill in the adult L2 classroom? If, as has been suggested, L2 learners will learn when they are ready then drill per se is probably not an optimal use of class time.

If as Spanish L2 students advance they rely more and more heavily on the process of overgeneralization in their successive approximations to the target language (as has been demonstrated in this study), then students might also profit from generalizations given in class (e.g., if we tell them that most words ending in -ma are masculine). Because the more advanced students are ready to handle generalizations (as can be seen by their choice of processing strategies at this level) and apply them productively, I suggest that teachers' generalizations in class can be helpful, and especially once the student has L2 as a basis for creative construction.

The present study has supplemented our knowledge of language learning in two areas. First, it has shown which kinds of errors are most prevalent in the language development of children and adults. Additionally, we have demonstrated that by and large children learning Spanish as an L1 and adults learning Spanish as an L2 use similar cognitive strategies, thereby providing further evidence for the existence of universal cognitive strategies for learning a language that are specific neither to a particular language nor to age.

NOTES

[1]MLU is calculated by counting the number of morphemes in a set number of the child's utterances and dividing this morpheme total by the number of utterances.

[2]The BSM consists of nine color cartoons and thirty-nine questions in English. It is administered in an informal chat with the child as natural speech is desired for this test. There are no correct answers, and as the BSM only looks at degree of proficiency. It is constructed so that certain structures (morphemes) will be elicited.

[3]It is difficult to decide what to count as a morpheme in determining Spanish MLU. Vivas decided that nouns, adjectives, and articles inflected for gender would count as two morphemes, while those inflected for plural would count as three. Vivas also counted three possible morphemes in each verb (root, tense, and person). This system of determining MLU, although reasonable, makes it hard to compare Spanish and English MLU as Spanish often seems inflated. However, I too used Vivas' method for computing the MLU of my three Spanish-speaking child informants.

[4]Corder (1978:69) cites evidence of these in both child and adult L2 acquisition and concludes that the age of learner, formality of learning environment, and teaching method are the main reasons for this type of error.

[5]The L2 = L1 Hypothesis of Dulay and Burt (1972) states that learning a L2 is substantially the same process, at least for children, as learning a L1, and that sequential development of the systems of both is the same no matter what the mother tongue.

[6]This contrasts with the findings of Dulay and Burt (1972), in which native language transfer played a very minor role. This difference may be due to the different categorization of error types between the studies.

[7]I do not consider L1 interference errors as productive because they do not indicate creative use of language, but rather show that the student is still thinking in terms of L1.

[8]Where there is more than one type of error in an utterance I have only underlined the error(s) of the type being discussed.

[9]I followed Vivas' method for computing Spanish MLU (see Note 3).

[10]The importance of input in L2 acquisition is supported by Corder (1978).

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APPENDICES

APPENDIX A

Acquisition of Spanish Grammar by Mexican Children

Kernan and Blount (1966)

	Percentage that Gave Correct Response (by age)		
Feature	5 - 7	8 - 10	11 - 12
Plural	78.9	78.9	85.1
Diminutive	68.4	75.6	82.4
Agentive-active	66.7	75.8	93.4
Place of business	43.4	71.8	87.1
Agentive-occupation	40.0	53.6	77.3
Future tense	30.0	44.4	78.9
Pres. perfect tense	38.9	56.7	83.9
Past tense: Imperf.	48.0	53.7	54.7
Preter.	32.3	50.7	68.7
Possessive	95.0	100.0	95.4

APPENDIX B

Adult Lexical Errors

error	correct utterance
Due to rule overgeneralization	
Se gusta una luna llena.	Le gusta una luna llena.
¿Quién monstruo se gusta plata?	¿A qué monstruo le gusta la plata?
Los interesantes de mí están música New Wave ...	Mis intereses son la música New Wave ...
Estoy sacando seis clases.	Estoy tomando seis clases.
No es tan miedo como parece.	No es tan miedoso como parece.
El mejor de gentes no te gusta.	A la mayoría de la gente no le gusta.
Es mucho interesante.	Es muy interesante.
Pienso que está realista.	Pienso que es realista.
Cuando estaba más joven ...	Cuando era más joven ...
Los países cercas ...	Los países cercanos ...
... donde yo quedaba mi tiempo.	... donde yo pasaba mi tiempo.
Hay tan personas que viven en San Diego que hablan español.	Hay tantas personas que viven en San Diego que hablan español.
En mi trabajar futuro yo voy a trabajar con muy gente diferente.	En mi trabajo futuro yo voy a trabajar con mucha gente diferente.
Mis amigos pueden mi llamar.	Mis amigos me pueden llamar.
Cerca de la frontera es mucho personas y hablan español es necesario.	Cerca de la frontera hay muchas personas y hablar español es necesario.
Por eso yo puedo entender las costumbres, la cultura.	Por eso yo quiero entender las costumbres, la cultura.
Cuando estaba una niña ...	Cuando era una niña ...
El favorito poeta de mí estás Edgar Allan Poe. Se lo estar muy fascinar y trágico.	Mi poeta favorito es Edgar Allan Poe. Es muy fascinante y trágico.
Si busque empleo, muchas veces el empleador va a trabajar lo que puede entender el español.	Si busco empleo, muchas veces el dueño va a dar trabajo al que pueda entender el español.
Para eso ...	Por eso ...
... si ellos acaban la exportación de petróleo.	... si ellos cesan la exportación de petróleo.
... si fuera una guerra.	... si hubiera una guerra.
... en Sudeamérica.	... en Sudamérica.
La muerte en el corrida es muy despacio.	La muerte en la corrida es muy lenta.
Al primer tiempo es chisto.	La primera vez es chistoso.
Mis amigos son muy bien.	Mis amigos son muy buenos.

Alguna de mi familia está de Boston.	Alguien de mi familia es de Boston.
... porque es mucha sangre en la corrida.	... porque hay mucha sangre en la corrida.
Por los españas es un deporte.	Para los españoles es un deporte.
Al primero de luchar ...	Al principio de la lucha ...
Cuando el toro es en la corrida de toros ...	Cuando el toro está en la corrida de toros ...
El muerte no estaría un deporte.	La muerte no debe de ser un deporte.
Es una mejor muerte para el toro.	Hay una mejor muerte para el toro.
Es matado de el empiezo de la corrida de toros.	Está muerto desde el comienzo de la corrida de toros.
Estoy una estudiante.	Soy estudiante.
... o digamos del debates.	... o hablemos de los debates.
No estás una niña.	No eres una niña.
Nos muerte al toro cuando tiene dos años.	Nosotros matamos al toro cuando tiene dos años.

Due to native language transfer

Es un grupo largo.	Es un grupo grande.
A veces pero no todos ...	A veces pero no siempre ...
¿Qué harás anoche?	¿Qué harás esta noche?
¿Quieres ir una fiesta anoche?	¿Quieres ir a una fiesta esta noche.
Yo gusta hablar con lo: waitress muy bonitas.	Me gusta hablar con las meseras muy bonitas.
Si busque empleo, muchas veces el empleador va a trabajar lo que puede entender el español.	Si busco empleo, muchas veces el dueño va a dar trabajo al que pueda entender el español.
Son 'capable' de hacer cualquier cosa.	Son capaces de hacer cualquier cosa.
No vivimos en un mundo utopian.	No vivimos en un mundo utópico.
Los países europeanos ...	Los países europeos ...

APPENDIX C

Adult Morphological Errors

error	correct utterance
Due to simplification	
Si ganía dinero, no sabía qué hacer con el dinero.	Si ganara dinero, no sabría qué hacer con el dinero.
No me gusta ver la corrida de toros.	No me gustaría ver la corrida de toros.
Si tuvieras, iré a la guerra.	Si tuviera, iría a la guerra.
Yo pelearía si habría otro país ...	Yo pelearía si hubiera otro país ...
Cuando hay una grande guerra mundial ...	Cuando haya una gran guerra mundial ...
Es necesario que aprendemos la lengua de otros personas.	Es necesario que aprendamos la lengua de otras personas.
Tal vez tendría problemas por el machismo.	Tal vez tenga problemas por el machismo.
Si los americanos habían rehusado de ir ...	Si los americanos hubieran rehusado de ir ...
No creo que es justa la quinta.	No creo que sea justa la quinta.
No los acepto.	No las acepto.
Due to reduction of syntactic redundancies	
Los más importante para mí gozar todo hace.	Lo más importante para mí es gozar de todo lo que hago.
El pasatiempo de mí toma cerveza y relajar el más posible.	Mi pasatiempo es tomar cerveza y relajarme lo más posible.
Un guerra pueden comenzar.	Una guerra puede comenzar.
Se lo estar muy fascinar y trágico.	Es muy fascinante y trágico.
Los mexicanos mandarnos el petróleo.	Los mexicanos nos mandan el petróleo.
Yo quiere hablar español cuando visitarlos.	Quiero hablar español cuando los visite.
Hay tantas personas que habla inglés.	Hay tantas personas que hablan inglés.
... o digamos del debates.	... o hablemos de los debates.
... que los corridas de toros es muy ridículo .	... que las corridas de toros son muy ridículas.
Mi primer vez es este semana.	Mi primera vez es esta semana.
Viví con un señora y un familia mexicana.	Viví con una señora y una familia mexicana.
Ellos va a estar felices.	Ellos van a estar felices.
Vamos a hacer algo, pero un gran guerra, no.	Vamos a hacer algo, pero una gran guerra, no.

Este es un razón es necesario para mi aprender más español.

Esta es una de las razones por la cual es necesario que aprenda más español.

Yo siento que mucho diversidad en todos los aspectos.

Yo siento que haya mucha diversidad en todos los aspectos.

Tengo un oportunidad visitar Chile.

Tengo una opportunidad de visitar Chile.

... para comprer muchas cosas y comer en las restaurantes.

... para comprar muchas cosas y comer en los restaurantes.

Cerca de la frontera es mucho personas y hablan español es necesario.

Cerca de la frontera hay muchas personas y hablar español es necesario.

... en el televisión.

... en la televisión.

Mis razones para estudiando español es ...

Mis razones por las cuales estudio español son ...

El muerte no estaría un deporte.

La muerte no debe de ser un deporte.

¿No te gusta fiestas?

¿No te gustan las fiestas?

Yo me ocupe de las reparaciones.

Yo me ocupo de las reparaciones.

Son puros tonterías.

Son puras tonterías.

Yo reconoce lo que dicen.

Yo reconozco lo que dicen.

Es necesario que aprendemos la lengua de otros personas.

Es necesario que aprendamos la lengua de otras personas.

Yo gusta hablar con los waitress muy bonitas.

Me gusta hablar con las meseras muy bonitas.

Los hojas de árboles son muchos colores muy bonitas.

Las hojas de los árboles son de muchos colores muy bonitos.

Mi interés empezo ...

Mi interés empezó ...

La muerte en el corrida es muy despacio.

La muerte en la corrida es muy lenta.

... en mi clases.

... en mis clases.

Estas personas son inocente.

Estas personas son inocentes.

No tengo nada en contra de que sean completamente igual.

No tengo nada en contra de que sean completamente iguales.

Las mujeres son igual a los hombres.

Las mujeres son iguales a los hombres.

Son capable de hacer cualquier cosa.

Son capaces de hacer cualquier cosa.

Mucho países ...

Muchos países ...

... costumes muy divertido.

... disfraces muy divertidos.

... de dos opiniones diferente.

... de dos opiniones diferentes.

Due to rule overgeneralization

... pero mañana no conozque ...

... pero mañana no conoceré ...

Si busque empleo, muchas veces el empleador va a trabajar lo que puede entender el español.

Si busco empleo, muchas veces el dueño va a dar trabajo al que pueda entender el español.

No se casaran con ella.	No se casarán con ella.
Si ganía dinero, no sabía qué hacer con el dinero.	Si ganara dinero, no sabría qué hacer con el dinero.
Cuando hay una grande guerra mundial ...	Cuando haya una gran guerra mundial ...
... en los países latinosamericanos.	... en los países latinoamericanos.
Nosotros tienemos que dar ...	Nosotros tenemos que dar ...
Ella quiere casar y tiene hijos.	Ella quiere casarse y tener hijos.
El favorito poeta de mí estás Edgar Allan Poe.	Mi poeta favorito es Edgar Allan Poe.
Es muy importante a entendar la cultura de otra gente.	Es muy importante entender la cultura de otra gente.
Tengo que aprendar español.	Tengo que aprender español.
... para comprer muchas cosas.	... para comprar muchas cosas.
Me gusto la lengua.	Me gusta la lengua.
Cerca de la frontera es mucho personas y hablan español es necesario.	Cerca de la frontera hay muchas personas y hablar español es necesario.
Los más importante para mí gozar todo hace.	Lo más importante para mí es gozar de todo lo que hago.
Muchas veces trabajé contigo.	Muchas veces trabajé con ella.
Yo vivo en San Diego por ochos años.	Yo vivo en San Diego desde hace ocho años.
Iré a la universidad para estudiaré.	Iré a la universidad para estudiar.
La edificio de administración ...	El edificio de administración ...
Después de la día festivo ...	Después del día festivo ...
Cada persona en mi familia se despertarán.	Cada persona en mi familia se despertará.
El mejor de gentes no te gusta.	A la mayoría de la gente no le gusta.
Si tuvieras, iré a la guerra.	Si tuviera, iría a la guerra.
Un guerra pueden comenzar.	Una guerra puede comenzar.
Ahora tiene muchos amigos.	Ahora tengo muchos amigos.
Quiero ... quiera ir a los toros.	Quiere ir a los toros.
Ellos hablen y dicen los mandatos.	Ellos hablan y dicen los mandatos.
Mi hermana no pude hablar.	Mi hermana no pudo hablar.

Due to native language transfer

Me gusta viviendo en San Diego.	Me gusta vivir en San Diego.
Me gusta mucho viajando en México.	Me gusta mucho viajar en México.
La gente comen el toro.	Le gente come el toro.
¿Qué piensas de charlando de ...?	¿Qué piensas de charlar de ...?
Habrá muchas gente.	Habrá mucha gente.

APPENDIX D

Adult Syntactic Errors

error	correct utterance
Due to simplification	
Los hojas de_árboles son __ muchos colores bonitas.	Las hojas de los árboles son de muchos colores bonitos.
Tengo un oportunidad_visitar Chile.	Tengo una oportunidad de visitar Chile.
Es muy importante a comunicar_la gente a_nadie le conoce.	Es muy importante comunicarse con la gente a la cual nadie conoce.
Iré_la escuela.	Iré a la escuela.
Soy_persona muy activa.	Soy una persona muy activa.
Hoy_estudiando información sistemas.	Hoy estoy estudiando sistemas de información.
Los más importante para mí_gozar todo hace.	Lo más importante para mí es gozar de todo lo que hago.
¿Quieres ir_una fiesta anoche?	¿Quieres ir a una fiesta esta noche?
Estás en un equipo de_escuela.	Estás en un equipo de la escuela.
Quiero voy_hablar español en México.	Quiero ir a hablar español en México.
El pasatiempo de mi_toma_cerveza y relajar el más posible.	Mi pasatiempo es tomar cerveza y relajarme lo más posible.
Los interesantes de mí están__ música New Wave ...	Mis intereses son la música New Wave ...
Yo siento que_mucho diversidad en todos los aspectos.	Yo siento que haya mucha diversidad en todos los aspectos.
Si busque empleo muchas veces el empleador va a trabajar lo que puede entender el español.	Si busco empleo muchas veces el dueño va a dar trabajo al que pueda entender el español.
Es necesario tener un otra cosa para ofrecer_su empleo.	Es necesario tener otra cosa para ofrecer en su empleo.
Muchos_los problemas son semejantes.	Muchos de los problemas son semejantes.
Due to reduction of syntactic redundancies	
Ella quiere casar_y tiene hijos.	Ella quiere casarse y tener hijos.
Es muy importante a comunicar__ la gente a nadie le conoce.	Es muy importante comunicarse con la gente a la cual nadie conoce.

Due to rule overgeneralization

Es muy importante a comunicar la gente a nadie le conoce.	Es muy importante comunicarse con la gente a la cual nadie conoce.
Me gustaba visitar con mis parientes.	Me gustaba visitar a mis parientes.
... montar de caballo.	... montar a caballo.
Es más fácil de tenis.	Es más fácil que el tenis.
Y no hay nada más de eso.	Y no hay nada más que eso.
... en comparación a la gente del Ecuador.	... en comparación con la gente del Ecuador.
Tienen la misma iniciativa a decir que ...	Tienen la misma iniciativa de decir que ...
Las muchachas hacen un trabajo casi lo mismo como los hombres.	Las muchachas hacen un trabajo casi lo mismo que los hombres.
Viajé en Los Gatos.	Viajé a Los Gatos.
Quiero viajar de México.	Quiero viajar a México.
Quiero voy hablar español en México.	Quiero ir a hablar español en México.
Estudio a las SDSU.	Estudio en SDSU.
Trabajo a 7/11.	Trabajo en el 7/11.
Es muy difícil para tener un novio latino.	Es muy difícil tener un novio latino.
Era muy importante para tener ...	Era muy importante tener ...
Lo quiero estudiar español.	Quiero estudiar español.
No es justo de decir ...	No es justo decir ...
Desde de ese día ...	Desde ese día ...
Queremos vamos a jugar.	Queremos ir a jugar.
Mis amigos pueden mi llamar.	Mis amigos me pueden llamar.
Quiero visitaré México mucho en el futuro.	Quiero visitar México mucho en el futuro.

Due to native language transfer

¿Quién monstruo se gusta_plata?	¿A qué monstruo le gusta la plata?
Me gusta_béisbol,_fútbol.	Me gusta el béisbol, el fútbol.
Es posible_no tengo un compañero.	Es posible que no tenga un compañero.
Después de graduarme de_escuela ...	Después de graduarme de la escuela ...
Creo_es una lengua muy bonita.	Creo que es una lengua muy bonita.
Los más importante para mí gozar__ todo_hace.	Lo más importante para mí es gozar de todo lo que hago.
Yo sequiré ir a SDSU.	Yo sequiré yendo a SDSU.
Hoy estudiando información sistemas.	Hoy estoy estudiando sistemas de información.

Es necesario tener un otra cosa para ofrecer su empleo.	Es necesario tener otra cosa para ofrecer en su empleo.
Este es un razón_es necesario para mí aprender más español.	Esta es una de las razones por la cual es necesario que aprenda más español.
Fui a_escuela en Guadalajara.	Fui a la escuela en Guadalajara.
Yo vivo en una pequeña cuidad_se llama Poway_norte de aquí.	Yo vivo en una pequeña cuidad que se llama Poway al norte de aquí.
Yo creo_español es más importante.	Yo creo que el español es más importante.
Después_New York yo vivía en Washington, D.C.	Después de New York yo vivía en Washington, D.C.
... que ellos tienen que ir a_ guerra.	... que ellos tienen que ir a la guerra.
¿No te gusta_fiestas?	¿No te gustan las fiestas?
Estoy una estudiante.	Soy estudiante.
La corrida yo no me gusta.	La corrida no me gusta.
Es muy macho a matar.	Es muy macho matar.
Es muy importante a comunicar la gente a nadie le conoce.	Es muy importante comunicarse con le gente a la cual nadie conoce.
Quiero ser una profesora.	Quiero ser profesora.
Es importante a aprender la lengua.	Es importante aprender la lengua.
Es muy importante a entendar la cultura de otra gente.	Es muy importante entender la cultura de otra gente.
Mi llamo es Lisa.	Me llamo Lisa.
... ser una profesora.	... ser profesora.
... si van a Irán o un otro país.	... si van a Irán u otro país.
No puedo pensar de nada.	No puedo pensar en nada.
_El mejor de gentes no te gusta ...	A la mayoría de la gente no le gusta ...
Estoy en favor de la corrida.	Estoy a favor de la corrida.
Mis razones para estudiar español es ...	Mis razones por las cuales estudio español son ...
Es importante cuando trabajando con el público.	Es importante cuando uno trabaja con el público.
El favorito poeta de mí estás E. A. Poe. Se lo estar muy fascinar y trágico.	Mi poeta favorito es E. A. Poe. Es muy fascinante y trágico.
La única razón porque Vietnam ...	La única razón por la cual Vietnam ...
Yo vivo en San Diego por ochos años.	Yo vivo en San Diego desde hace ocho años.
Yo gusta hablar con los waitress muy bonitas.	Me gusta hablar con las meseras muy bonitas.
El hombre se cortó su oído.	El hombre se cortó la oreja.
En domingo va a mirar el fútbol.	El domingo va a mirar el fútbol.

APPENDIX E

Child Lexical Errors

error	age of child	correct utterance
Due to rule overgeneralization		
Bájala.	1;11	Bájame.
Súbela.	1;11	Súbeme.
Puso un suéter muy largo.	4;7	Tuvo un suéter muy largo.
¿Cuándo llega el inviernes?	4;7	¿Cuándo llega el viernes?

Child Morphological Errors

Due to simplification		
El no quería que se vaya	4;7	El no quería que se fuera.
Ella le dijo que no quiere que él entre.	4;7	Ella le dijo que no quería que él entrara.
Le pregunté si le gusta la comida.	2;8	Le pregunté si le gustaba la comida.
Había una vez un gato que vive ...	4;7	Había una vez un gato que vivía ...
Los niños dijo que si les dijimos a la mamá que pasó ...	4;7	Los niños nos dijeron que si le dijéramos a la mamá lo que había pasado ...
Se lo iban a robar.	4;7	Se los habrían robado.
Se la comió todo	3;1	Se la habría comido todo.
Se lo comió el perro.	4;7	Se la comió el perro.
Lo van a cortar.	4;7	La van a cortar.
Se lo van a comer.	3;1	Se la van a comer.
Due to reduction of syntactic redundancies		
... una sombrero.	3;5	... un sombrero.
Los niños dijo que si les dijimos a la mamá que pasó ...	4;7	Los niños nos dijeron que si le dijéramos a la mamá lo que había pasado ...
Yo le asusté a él.	4;7	Yo lo asusté a él.
Due to rule overgeneralization		
Se corró ...	4;7	Se corrió ...
El le dice que no le pongas la dirección.	4;7	El le dice que no le ponga la dirección.

Los niños dijo que si les dijimos a la mamá que pasó ...	4;7	Los niños nos dijeron que si le dijéramos a la mamá lo que había pasado ...
Tengo los pies secaditos.	4;7	Tengo los pies sequitos.
¿Cuándo veniste?	4;7	¿Cuándo viniste?

Child Syntactic Errors

Due to simplification

Los niños dijo que si les dijimos a la mamá que pasó ...	4;7	Los niños nos dijeron que si le dijéramos a la mamá lo que había pasado ...
La mama viene a su casita.	3;1	Quieren que la mamá venga a su casita.
Tiene una leche con un vaso.	4;7	Tienen una botella de leche con un vaso.
Voy a corretear__.	3;5	Voy a corretearlas.
...__ la casa gorda.	3;1	... de la casa gorda.
__ comiendo.	1;11	Está comiendo.
__ agüita.	1;11	Quiero agüita.
__ bonito.	1;11	Es bonito.
La señora está__abuelita.	1;11	La señora está con la abuelita.
__ canica cayó.	1;11	La canica se cayó.

Due to reduction of syntactic redundancies

Yo __ acuerdo de estos dibujos.	4;7	Yo me acuerdo de estos dibujos.
El monito __ 'costó.	1;11	El monito se acostó.
Canica __ cayó.	1;11	La canica se cayó.
Yo __ dije 'Hola' a Kevin.	4;7	Yo le dije 'Hola' a Kevin.

Due to rule overgeneralization

Me subí en un árbol.	4;7	Me subí a un árbol.
En mañana voy a hacer ...	4;7	Mañana voy a hacer ...
No la dejó a ir.	4;7	No la dejó ir.
¿Puedo a tomar agua?	4;7	¿Puedo tomar agua?
Quería a comer.	4;7	Quería comer.
En el domingo vamos a misa.	4;7	El domingo vamos a misa.
Me se olvidó.	3;5	Se me olvidó.
Me se cayó.	3;5	Se me cayó.
Me se olvidaron.	3;5	Se me olvidaron.